REPUBLIC OF LIBERIA

FOUR YEAR PLAN FOR ECONOMIC AND SOCIAL DEVELOPMENT 1967 - 1970

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FOREWARD

BY THE
CHAIRMAN, NATIONAL PLANNING COUNCIL

In launching our National Development Plan for the years 1967-1970 the Government of Liberia is seeking to increase the pace at which the nation is achieving its social and economic goals. Much progress has been made, especially in the last several years, and the basis of a sounder economy has been created. This is the time to consolidate these gains and initiate an orderly process of continuing growth in the economy and a broader distribution of the fruits of economic progress.

To this end we must devote all the resources of the nation, not only financial resources but equally its human and administative resources, to the coordinated and rational pursuit of our national goals. The policy and investment decisions that are at the heart of the planning process must each be weighed in terms of their contribution towards increasing the rate of economic and social progress.

The availability of resources to finance development during this plan period will be stringent relative to the long-run potential of the economy to generate such resources. For this reason the National Development Plan strives to concentrate effort in areas where we can expect the most rapid returns. Throughout the Plan we must emphasize increased efficiency and output. Only in this way can we achieve the increase in national income and government revenues required for the adequate provision of the full range of economic, social, educational, and health services which are instruments to a better life for all of our population.

To accelerate the growth of investment during the coming years, the basic philosophy of the Open Door Policy which has resulted in unprecedented growth of the economy will be continued. Our national investment climate will continue to be characterized by the unique combination of political stability, free movement of capital without currency restriction and reasonable taxation.

We shall continue to pursue the principles and philosophy of the free enterprise system and it shall be the policy of Government to encourage the establishment of industries through private investment. Every effort will be made to encourage Liberian participation in industrial projects benefiting from foreign capital participation and technical know-how.

Government shall take positive steps to support, through investment incentives, productive investments in the private sector of the economy. Special attention will be given to investment undertakings which will result in import substitution, the use of local raw materials and projects which contribute not only to growth in the domestic product but also significantly to growth in the national product.

The activities included in the Plan will contribute to meeting our general objectives: a steadily rising income ever more equitably distributed; national integration; and ever widening participation by our citizens in the economic activities of the country.

Two specific criteria for determining priorities should be emphasized:

a) Highest priority should be given to productive projects, those for which the economic returns are greatest. One of the obvious sources of continuing financial difficulty is the fact that many existing public projects, while being essential to development, did not generate substantial additional income or government revenue in the short run, while they added to the burden of recurring costs. A greater share of future development expenditure must therefore be allocated to programs with greater income generating effects in the short-run, and consequently with greater government revenue effects.

b) Other things being equal productive projects for which foreign financing can be found should receive priority.

It should be emphasized that in formulating the Plan we have not abandoned or modified the principles of Government and economic policy that have guided the nation in the past, and which have proven their worth in the remarkable progress we have made within their framework. We are not proposing a plan that calls for a fully planned economy or overcentralized economic decision making. Rather, we are proposing a plan that, on the one hand, will present in some detail the development allocations in the public sector designed to assure that the resources channelled through the budget make the greatest contribution possible to achieving our national goals, and, on the other hand, defines policies with respect to the private sector designed to be most conducive to the maximum contribution by the private sector, domestic and foreign, to the rapid growth of a healthy national economy. It is a plan that places major reliance on individual and private initiative.

In conclusion, I wish to congratulate the Department of Planning and Economic Affairs including its Advisors and all other public officials and all others, Liberian and foreign, whose cooperative efforts and hard work made this Plan a reality. I call upon the nation to exert maximum effort to speed our economic and social development by the fulfillment of the goals and targets of our National Development Plan.

W.V.S. Tubman
PRESIDENT OF THE REPUBLIC OF LIBERIA

INTRODUCTION

During the last two decades Liberia experienced a growth rate surpassed by few other countries which literally changed the face of the nation. Under the conditions prevailing throughout most of this period, the demands upon Government revenues were enormous, particularly for the provision of basic infrastructure. The general climate in these years, characterized by rapidly rising revenues, was favourable to the initiation of efforts to meet all such demands, without any systematic procedures for determining their relative priority in terms of the country's long-range development.

However, by the beginning of the present decade, it had become apparent in the light of changing economic conditions - and the increasing complexity of the society which they have helped to create - that it is no longer feasible to make current policy decisions solely in response to the circumstances of the present moment. Rather, it was recognized that such decisions must be measured as well in terms of their actual or potential contribution to the accomplishment of the structural and institutional changes which are necessary for orderly long-range development.

The essential rationale for development planning is that all economic targets cannot be simultaneously achieved; individual priorities must be systematically determined and pursued with a view to maximizing returns to the overall economy, and ensuring as effectively as possible against the recurrence of those periods of

financial stringency and readjustment which might otherwise arise in the absence of established development priorities.

The process of planning for economic development in Liberia had its beginnings in early 1950 under a Technical Cooperation Agreement between the Governments of Liberia and the United States. The first attempt was a Five Year Development Programme inaugurated in 1951 under the direction of the Joint United States-Liberian Commission for Economic Development. This programme was later expanded into a Nine-Year Development Programme which expired in 1960. Among other things, the programmes and other planning projects which followed focused attention upon the necessity for analysis and research in social and economic problems. By technical and professional standards these initial efforts left much to be desired; nevertheless, they did represent a movement in the right direction, and led to the achievement of relatively substantial results.

Economic planning, in the sense of coordinated government decision-making, with decisions taken in awareness of national priorities and economic implications, is still relatively new in Liberia. The first step toward such systematic economic development planning was the Legislative Act in early 1969 which provided for the establishment of a Bureau of Economic Research. This Act was implemented in October 1959, and, by Executive Order in November of the same year, the Bureau was also made the central statistical agency of the Government. The new character of the Bureau was formalized by the

Legislature in early 1961, with the redesignation of the agency as the Bureau of Economic Research and Statistics.

Continuing progress in both the private and public sectors of the economy resulted in growing demands upon the existing organization, and it was recognized that there was an increasingly urgent need for a more broadly based planning effort within the Government. In response to this need, the National Planning Agency was created by Legislative Act on May 8, 1962. This Agency consisted of two bodies: 1) The National Planning Council, composed of the President as Chairman and seven Cabinet Ministers, the decision-making body on matters of economic policy and planning; 2) The Office of National Planning, the staff arm of the Agency. The Director-General of the Office of National Planning was designated as the Executive Secretary of the National Planning Council.

The broad general functions assigned to the Agency included the conducting of economic research, the collection of the data required for such research, the establishment of national economic priorities, the evaluation and coordination of proposals for foreign assistance and private investment, and the preparation of National Development Plans.

Prior to 1966, the efforts of the National Planning Agency were concentrated primarily upon encouraging the development of the necessary pre-conditions for effective planning, with major emphasis on training to strengthen the Agency's professional and technical staff,

and the strengthening of procedures and institutions helpful in the making of sound, well-considered economic policy decisions.

The growing practice of review of individual projects by the Office of National Planning and their approval by the National Planning Council encouraged more careful elaboration and evaluation of new programs and projects. Similarly, negotiation and/or review of applications for concession agreements and private sector proposals resulted in more orderly and careful policy decisions in this important area. These developments were augmented by growing cooperation on technical and other matters between the Office of National Planning and other Departments and Agencies of Government. These procedures, in addition to their immediate value, played an important role in laying the groundwork for the cooperative effort which has been so essential to the successful elaboration of the present Plan.

Another pre-requisite for meaningful planning which was met by the Office of National Planning was the development of more comprehensive information about the economy - through the special studies as well as the continuing expansion and refinement of the Government's statistical programs. The major effort of this nature was the 1962 Population Census. Other typical studies covered the manufacturing industry, the construction industry, port facilities, various public enterprises public sector accounts and gross national product.

Since early 1966, the efforts of the National Planning Agency have been directed largely to the step in the planning process to which all

of these earlier efforts had been leading: the mobilization of all the intellectual and technical forces of the country for the purpose of elaborating this Four-Year Development Plan for the years 1967-1970.

In recognition of the increasing scope of its responsibility in the planning process, and the critical role of planning in Liberia's future, the staff arm of the National Planning Agency was redesignated on August 1, 1966, by an Act of the Legislature, as the Department of Planning and Economic Affairs.

Since planning is by definition a continuous process that to some extent involves all aspects of government, the above summary of the evolution of the planning machinery proper can give only a partial picture. In the period since the early 1960's institutional, organizational, and procedural changes have been effected by departments and agencies in almost all areas of government which have increased the government's capacity for more effective economic management and planning. These changes are too numerous to catalogue fully here, but two must be singled out as of strategic importance: the work of the Special Commission on Government Operations which is improving administrative performance throughout the government, particularly personnel, accounting, and purchasing procedures; and the strengthening of the budgeting process by the Budget Bureau.

In the latter area of particular importance to the planning process has been the evolution, concurrent with the improvement of budget procedures in general, of the concept of a Development Budget. The

1966 budget contained an attempt to provide explicitly for a development budget, the crucial link between planning and implementation, in the form of identification and separation, within the general budget, of appropriations for development projects and programs. This process was intended to assure that funds are made available for the highest priority development activities, that the total requirements of the development program are met to the maximum extent possible and that implementation can be more easily evaluated. This evolution of the development budget has contributed significantly to the strengthening of the planning process, since the relationship between the nation's plans and its action programs can now be much more explicitly defined.

If the greatest possible benefit is to be derived from this process, the major area requiring further analysis is the relationship of development to the full range of governmental functions. This in turn will permit a more precise definition of expenditures which should be included under the heading of development and their segregation from those items which should be provided for in the non-development portion of the budget.

The 1966 Development Budget was largely a capital budget, comprised almost exclusively of appropriations for construction and equipment. In 1967, however, the Development Budget provides several important allocations for non-capital items which, by their nature, are nonetheless essential components of development expenditure.

The actual preparation of the Plan as such was initiated with the organization of the eleven inter-departmental Policy and Planning

Committees established by Executive Order No. 10, dated April 10, 1966: Agriculture and Forestry; Communications; Education; Health; Industry; Manpower; Natural Resources and Surveys; Ports and Air Transport; Power and Water; Revenue and Tax; and Roads.

These Committees provided for the broadest possible representation of various segments of the private sector. The Department of Planning and Economic Affairs, in view of its overall responsibility for coordinating plan preparation, was represented on all Committees and furnished at least one member of the secretariat of each Committee.

In general, each Committee sought to: define the targets to be set in each sector, formulate an investment program designed to achieve those targets within limits set by prospective resources, identify policy issues implicit in the targets and their achievement, and propose any institutional or administrative changes considered necessary or desirable in the sector.

It cannot be over-emphasized that these Committees, representing a broad inter-departmental consideration of each of the key sectors of the economy, have been a major factor in the preparation of the Plan. They have ensured that the views, expertise, and experience of the full range of relevant agencies have been brought to bear in the planning of each of the individual sectors. Consequently the Plan should be viewed as a joint product of all segments of the economy, reflecting the best possible balance of the many and varied interests involved in such an effort.

This Plan has been prepared in a period that has witnessed some slowdown in the rapid pace which marked Liberia's development in the recent past. The present period may be looked upon as one of consolidation of past gains, a "digestion" phase following upon the rapid changes which occurred in the decade prior to 1962. This situation, accentuated by declines in world market prices for the two major export commodities, has resulted in the current period of relative austerity.

Under these conditions, the restriction of "normal" Government expenditures to the practical minimum becomes increasingly important if funds are to be available for even the most urgently needed developmental projects and programs. Here again the key role of the budget process - including the essential corollary of expenditure control within budgetary limits - is made apparent.

Government's budget is the single most important instrument of development policy - public spending and taxing both expressing priorities within the public sector itself and influencing the pace and direction of economic activity within the private sphere. This is even more critically true when the plan faces implementation in times of relative austerity, when it may not be possible to meet fully those demands upon Government revenues which are generally recognized as essential to economic development.

It is recognized that there may be severe limitations upon the possibility of successful implementation of a development plan which is not consciously and realistically related to the principal non-economic factors operating in any country even if these factors are not formally

incorporated in a detailed manner into the plan itself. Consequently, every effort has been made in the present plan to provide for consideration of the political, social, and cultural implications of the various programs and projects, and to modify the proposals in the light of these considerations to the extent that such action has been deemed necessary.

For example, where relevant, the individual projects and programs have been evaluated in terms of its relationship to the program of National Unification. For the success of the Plan will ultimately be measured in terms of its contribution to this broader aspect of Liberia's national destiny and the destiny of each of her citizens.

Chapter 1

REVIEW OF THE ECONOMY

The economic history of Liberia since independence falls into two sharply contrasting periods: the approximately one hundred years from the establishment of the Republic in 1847 to the end of the Second World War and the two decades since then. Throughout the long earlier period, the Republic led a precarious existence, both politically and economically. During this period the major characteristic of the economy was isolation. Not only was the nation isolated from the major centers of world economic activity and the channels of international trade, but even within the country most localities were cut off from easy communication with other parts of the country. For this and other reasons, the period was one of little, if any, change in the mainly subsistence structure of the economy. While there were intermittent periods of vigorous agricultural or commercial activity, these never generated sustained growth. Sooner or later these periods of development were brought to an end by the inhibiting effect of the isolation of the enclaves in which they made their appearance.

In contrast, the two decades starting in the mid-nineteen forties have been marked by rapid development characterized by pervasive structural changes that have altered the face of the economy and have created for the first time the possibility of initiating a process of sustained growth.

This period of rapid growth was preceded by two major changes that took place in the later part of the preceding period, and were instrumental in facilitating the subsequent change in the performance of the economy.

a) In the middle of the 1920's the first major foreign investment took place, the establishment of large-scale rubber production by a major international firm, Firestone, which ultimately developed into the world's largest rubber plantation.

b) During the Second World War Liberia provided the Allies with transport routes and staging areas, leading to the establishment of the international airport at Robertsfield and ultimately to the construction of modern port facilities at Monrovia.

Together these changes greatly increased the contact between the national economy and the world economy, and to a lesser extent reduced isolation within the country created a major source of employment; and initiated the process of significant monetization of the economy - all necessary but not sufficient preconditions for the subsequent period of rapid growth and development. Three additional factors played significant roles in the rapid post-war transformation of the economy:

a) The Open Door Policy announced by President Tubman in his first inaugural address, which together with the absence of any exchange controls and the internal circulation of an international reserve currency, the US dollar having been adopted as the medium of exchange in 1944, has created one of the most attractive investment climates to be found in the developing world.

b) Investment on a major scale in the exploitation of the nation's substantial reserves of high quality iron ore, representing autonomous investment at a very high rate relative to population.

c) Programs of foreign assistance making their appearance for the first time in the postwar period, which not only furnished significant additions to available investment resources but also supplied necessary key elements of technical expertise that would otherwise have been missing.

Sources of Growth

Iron Ore: The iron ore industry had its beginning in 1946 when the first concession agreement was signed with the Liberian Mining Company (LMC). LMC started operations in the Bomi Hills area in 1951. Subsequently three more companies opened up major iron ore deposits. Hundreds of millions of dollars were invested in roads, railroads, plant facilities, harbours, and new towns. Exports of iron ore amounted to nearly $120 million in 1966, export volumes having increased from 2.8 million long tons in 1961 to over 16 million long tons in 1966. Towards the end of the pre-Plan period two of the iron ore producers made decisions to construct pelletizing plants - a major step towards forward vertical integration - increasing the degree of processing within Liberia. One of the two plants is now under construction.

Rubber: The rubber industry is still led by the Firestone Company, whose Harbel Estate alone has more than 75,000 acres under cultivation. Other foreign firms have been attracted to Liberia as well and together have another 50,000 acres planted in rubber, the major part of which will come into production in the next five years. In addition to the foreign-owned rubber plantations, many Liberian-owned rubber farms have been established, with a total area under cultivation of 140,000 acres.

Of some 4,000 independent farms, 250 have an area of more than 100 acres. Total rubber production amounted to nearly 120 million pounds in 1966 with an export value of about $26 million.

As a result largely of the investments in iron ore and rubber, additional foreign resources have been invested in expansion of commercial services, construction activity, roads, railroads, port facilities, and industry.

Increased Government Revenues: During the past two decades of extraordinary economic expansion, Government revenues increased from under $4 million in 1950 to about $45 million in 1966. This in itself enabled Government for the first time to take an active and important role in development. Increased Government revenue made it possible to vigorously implement a policy of economic development and national unification. The importance of this policy must be evaluated against the background of a nation which twenty years ago consisted of a large number of different tribal areas, with different languages and customs, and a series of coastal enclaves, all isolated from each other and with only a minimum of central administration. Today citizens from all parts of the Republic are found working, studying and living together.

The country has been further united by a network of primary and secondary roads. Areas which were once separated by days of arduous travel are now easily reached by road in a matter of hours. The country now has 3,800 miles of all weather roads. Just prior to 1950 this total was a modest 230 miles.

The Government has extended its administrative, social and economic services to all areas of the country. Total school enrollment in 1950 was 20,000. This has now been increased to 95,000. Most of this increase has taken place in the interior of the country. Similar achievements have been made in health.

By the early sixties, however, it became apparent that Government had over-extended itself. First of all there was the enormous backlog of infrastructural needs which, under the feeling of boom that characterized the preceding period, it seemed possible to meet all at once. Secondly since revenues were increasing rapidly, forecasts of future revenue prospects were bright and foreign creditors were obliging. There was, however, little coordination and effective planning in the use of public resources. Because of the absence of effective systems of budgeting, accounting and expenditure control, Government was unable to foresee the magnitude of its financial commitments as they evolved. Then rubber and iron ore prices fell, seriously aggravating the problem by sharply reducing the anticipated increase in revenues, and precipitating a financial crisis involving a debt burden in 1963 of $153.8 million of which $33.5 million or approximately the total of government revenues for that year, was due for payment in 1963.

In the years following 1963, revenues rose relatively rapidly again, mainly as a result of increased production and export of iron ore from the new mines. Although a regime of austerity was maintained

during this period the revenue increases gave room for substantial increases in expenditures. While debt service payments declined over this period from about $11 million in 1964 to $9.5 million in 1966, non-debt expenditures increased by some $9 million, of which about $2.5 million was spent as Government contribution to a series of development projects financed through external assistance. Although the period shows an increase in development expenditures, the increase in operating expenditures was more rapid. The bulk of this increased expenditure was for personnel service with little additional provision for operating costs in recent budgets.

By the end of 1966 the iron ore mining companies were producing almost at full capacity. Without the entrance of new iron ore ventures only small increases in revenues from concessions under present arrangements can be expected in the immediate future. Unless there is considerable increase in revenues from existing taxes, especially customs revenues, which are related to economic activity or unless new revenues sources can be found, total revenues will increase only slowly. If at the same time current expenditures continue to grow at a rate of 8-9% per year as in the last two years, without any new development programs and with no redress in the imbalance between personnel and supporting costs, a current budget deficit of the magnitude of $1.5-$2.0 million in 1968 can be anticipated, even if the present budget support continues. In 1969 and 1970 the situation will be even more critical due to a sharp increase in debt service.

There is little hope to maintain the rate of growth in revenues experienced over the last few years unless income growth is accelerated

and this again depends on the magnitude and composition of the development program. If development projects are sacrificed because of lack of resources, the level of economic activity is unlikely to rise and may even decline, with an adverse effect on future revenues, which would further aggravate the situation.

An important step towards meeting the requirements of a substantial increase in the development effort during the plan period was the introduction of the Austerity Plan in connection with the 1967 budget. This plan includes:

a) The establishment of a special debt service account equal to 1½% of total revenues collected, to assist in meeting the increase in debt service in 1969 and 1970.

b) Reduction in allowances by 10%. Items to be reduced include: (i) entertainment allowances, (ii) selected cash allowances and (iii) all foreign travel allowances.

c) The introduction of an Austerity Tax. A tax on the net salaries and wages of citizens in both the public and private sector of 4.2% for incomes over $600.00 per annum and of 2.1% of salaries below $600.00 per annum.

d) Improvements in collection of excise taxes by imposing the tax on raw materials used in production of commodities, rather than on the final product.

e) Improvements in the control of duty free privileges by requiring all agencies and institutions having such privileges to provide the Commissioner of Customs, through the agencies of Government responsible for their activities, a complete itemized estimate of the quantities expected to be imported during a specific period.

f) Adjustment of the tariff to reduce the rate on certain commodities, which were unintentionally increased in the recent revision of the tariff.

g) Change in Registration fees for taxicabs, buses and trucks from the present $100 per year per firm to $25 per year per vehicle, minimum charge $50.00.

h) Increase in Vehicle Licence Fees.

The Flow of External Assistance: External Assistance fills a very important gap in the financing of Liberia's social and economic development. Without external financial assistance, the considerable infrastructural investments made over the past few years would not have been possible. In addition to loan funds for such capital projects, Liberia receives a variety of grants in forms of technical assistance in various areas of Government operations, in particular education.

No complete record of total external assistance is available for years prior to 1964, but the U.S. Government has been the major source of technical assistance, while the Eximbank has provided the major part of loan capital contributions. The United States grant assistance to Liberia increased from about $5 million in 1960 to about $9 million in 1963. The Export-Import Bank loans totalled about $35 million during the period 1951-1961.

Since 1963, however, the Liberian Government has signed new loan agreements not only with the United States Agency for International Development, but with such other donors as the International Bank for Reconstruction and Development and the Kreditanstalt fuer Wiederaufbau of the Republic of Germany and technical assistance is now obtained from a much broader range of donors, including the United Nations. The U.S. technical assistance has continued at the same time and the total

inflow of official foreign aid is now about $30 million per year.

Table 1.1 shows total foreign aid over the past three years distributed by donors and types.

Capital assistance covers construction and equipment and is almost entirely on a loan basis. Non-capital is a residual and consists mostly of grants. Capital assistance has been received for such infrastructure investments as schools, roads, health facilities and the Mt. Coffee Hydro-electric Dam, while non-capital assistance is technical assistance in the form of scholarships and experts in various fields under United Nations Regular and Expanded Programs and the Special Fund, the Peace Corps, various USAID financed programs and many others.

As can be seen from Table 1.1 the substantial increase in total foreign aid between 1964 and 1966 was due to increase in capital projects. Some of these projects will start in 1967; unless further capital projects are initiated, total foreign aid will decline towards the end of the plan period.

A comparison of total external assistance with domestic Government resources shows clearly the very important role played by external aid in the development programs of the country. Total resources available to the public sector amount to some $75 million per year out of which $30 million, or about 40%, comes from external sources. Taking into consideration that expenditures such as normal operating costs and debt service have to be financed out of domestic resources, the importance of external aid as a source of development financing becomes even more obvious.

Table 1.1

FOREIGN ASSISTANCE EXPENDITURES
FOREIGN ASSISTANCE EXPENDITURES 1964-1966

($'000)

Country or Institution	1964		1965		1966	
	Capital	Non-capital	Capital	Non-capital	Capital	Non-capital
United States 1/	3,549	7,888	11,835	10,308	10,675	9,573
West Germany	10	391	3,000	310	5,600	570
U.N.	-	664	-	810	-	670
World Bank	70	-	1,120	-	1,210	-
China	-	155	-	90	-	180
All others 2/	275	358	1,100	100	800	410
Total	3,904	9,456	17,055	11,618	18,285	11,403

1/ Peace Corps included; expenditures in calendar 1965 were $1,381 million against $1,182 million in 1966; U.S. Military Mission and Export Import Bank excluded.

2/ I.M.F. excluded.

Sources:

For 1964, Annual Report, Office of National Planning for the Period October 1, 1964 to September 30, 1965, p.117. For 1965, USAID from Richard M. Barkay, Office of National Planning, Public Sector Accounts of Liberia, (1966) p.68; USAID/Liberia Controller's Reports. Other donors from Interviews with Department of Planning or from Public Works Accounts.
For 1966, USAID from USAID/Liberia Form 203 Project Reports and Controllber's Reports. Other donors from Interviews with the Department of Planning or from Public Works Accounts.

It must be borne in mind, however, that external aid carried with it domestic financial responsibilities. First, almost every external aid project requires some contribution from the Government in form of land, site clearance, housing and office space for experts

etc., and in many cases direct cash contributions. Secondly, in the case of capital projects external aid is normally obtained only in the construction phase, while it becomes the responsibility of the Government to operate and maintain these facilities when construction is completed. This can be a substantial burden on the Government and "commit" resources that would otherwise have been available for development projects in following years. Thirdly, loans will have to be serviced in the future. This also reduces resources available for new spending in future years.

The fact that foreign aid is not costless does not, of course, mean that Liberia should not try to obtain as much foreign aid as possible, but it does mean that all projects should be carefully analyzed in terms of their present and future budgetary implications as well as in terms of how well they "fit" within the plan framework, before a decision on them is taken.

Problems Confronting the Economy

The prospects for future economic growth are good. However, various problem areas in the present economic structure merit close attention. These problems, if unheeded, could interrupt the continued high rate of growth that could otherwise be achieved by sound economic policies.

These problem areas are:

Dependence on Two Primary Export Products: Iron ore and rubber account for some 30% of gross domestic product and about 90 percent of the value of total exports. As has been noted previously the trend

of world prices for these products is downward. Increasing diversification of production and the introduction of intermediate processing is necessary to broaden the national economic base.

Wide Fluctuation in Investment Activity: An investment boom, such as that which started in the late 1950's, in which both private and public investment built up over a short period of time to levels quite high as compared to the pre-boom period, inevitably leads to levels of employment, revenues, and associated service activities which can not be sustained when the investment boom subsides. The post-boom period will be characterized by painful adjustments including contraction of employment, slowing down in commercial activities, and depressing impact upon government revenues leading to austerity. The adjustments will inevitably be more severe when the boom was very large relative to a small economy. While it is true that the impact of these sharp fluctuations in the volume of investment upon Liberia's national income is cushioned by the very high import content of both investment and consumption, and the large element of external finance of investment, their dislocating effects remain quite serious. This is particularly true of their impact on employment (including partially irreversible movement of labor off the land to centers of investment activity), commercial activity, the construction industry, the transport sector, and the internal credit situation. Although it is recognized that neither the private sector nor the government has complete freedom in determining the timing of their investments, it is hoped, however, that both sectors

would attempt to schedule their investment programs to the extent possible without affecting their basic objectives in order to minimize fluctuations in the level of investment. To this end it will be necessary to create a full flow of information on private investment plans and a more effective dialogue between the public and private sectors.

Limitation of Public Resources Available for Development: The scope for government actions to increase revenues is at present limited. Revenues depend to a large extent on the profitability of concessions and on economic conditions largely determined by external forces. The service of the public debt incurred during the investment boom is a large first claim on revenues and will be increasing in size over the next several years. The tax burden on the majority of the public is already heavy. The government can, and must, increase revenues, but these factors set limits to the extent to which freely available resources can be increased. This underscores the need for caution in the increase of expenditures which do not directly foster development or contribute to meeting the government's major objectives.

Efficiency of the Public Administration: Public administration has justifiably expanded rapidly. It must be recognized however that, as in any rapidly expanding organization, efficiency has frequently fallen below acceptable standards. Efforts to remedy this situation in this period of consolidation have been less effective than necessary

because of the lack of the required resources. Inefficiency is usually found where the ratio of support costs to payroll is low. Insufficient funds are available to support qualified personnel with the necessary supplies and equipment to make their work effective. Consequently, support (materials, supplies, equipment) for development programs must be increased to ensure efficiency. Training and reorganized procedures are also basic elements in the improvement of administration.

Limited Liberian Participation in the Economy: The high level of foreign investment and the dynamic nature of our economy has attracted many foreigners to Liberia. Liberia will continue its hospitality, consistent with the Open Door Policy, realizing that in a rapid growing economy there is a place for all. However, Liberian participation in the industrial sector has been limited as reflected in the large and increasing difference between National Income and the Domestic Product.

More serious efforts must be made to encourage increased agricultural production by Liberian farmers and to support Liberian participation in commerce, industry and service activities. Specific training programs must be organized to train Liberians for supervisory and management functions in large foreign enterprises. It is to the advantage of foreign enterprises to train and use Liberian personnel instead of expatriates.

The Balance of Payments, Money Supply and Budget: Although the Liberian dollar is the legal tender of the nation, the notes in circulation consist of the U.S. dollar, and there is complete freedom of international transfers. Furthermore, since the effective circulating medium is the currency of another country, the Government maintains no central banking mechanism, nor does it maintain reserves of foreign exchange in any significant amounts.

In a sense, Liberia does not have a conventional balance of payments problem of the type experienced by many developing countries. The Government does have substantial obligations to foreign creditors, but these could be acceptably paid by the currency that circulates within the country. In addition, an unusually high proportion of total investment in the past has been in the form of foreign investment which has supplied directly a large part of the import component of total investment.

What in other countries arises as a balance of payments problem, is for Liberia really a budgetary problem - the ability of the Government to raise sufficient revenues in "local currency" to meet its current obligations, domestic and foreign. On the other hand, in Liberia an unusually large proportion of the money supply is generated by foreign transactions and the supply of the circulating currency is produced by export surpluses and could be extinguished by a series of balance of trade

deficits. Thus, while the monetary system of Liberia precludes a conventional balance of payments problem, its foreign trade may give rise to important budgetary and monetary problems. This is not to say that the present monetary system is not, on balance, an advantage to the country. The use of a major international reserve currency as the circulating medium has, by definition, meant stability of the exchange rate, and this, in turn, has been one of the major inducements leading to the high level of foreign investment that has taken place. It also does not imply that the government can safely ignore its balance of payments, and, in particular, the level of its exports. Like all developing nations, Liberia has a resources problem which in the long run will be eliminated only by a substantial growth in exports.

Weak Linkage Effects: While in Liberia very large investments in mining and in the rubber industry do give rise to substantially increased income in these sectors, since a high proportion of all consumer and capital goods are not produced in Liberia, a correspondingly high proportion of these increased incomes become demand for imports. As a consequence, the secondary productive increases that might have been expected in agriculture, industry and services, to satisfy the resulting increase demand, has been smaller than would have been experienced in a large economy.

Perspectives for Economic Growth:

The immediate future will probably be characterized by a reasonable rate of growth. The availability of human and natural resources, combined with Liberia's traditional liberal policies, creates the conditions for

substained economic growth over a long period.

Liberia will continue to utilize the assistance of foreign capital and know-how. The traditional policy toward foreign investment will guarantee that Liberia will remain an attractive country to foreign investment.

Liberia has extensive uncultivated land areas suitable for agriculture. Both the Government and private firms are experimenting with new crops and new methods. Early in the next decade new agricultural export products will begin to make substantial contribution to our export trade. There are ample opportunities for improvement in traditional export crops and for expansion of production for the local market.

Liberia has large areas of untouched forests. An annual production of wood and wood products of many times the present level is possible. This production will increase gradually in the next few years reaching high levels in the next decade. Forest products industries will be established.

Liberia is rich in mineral resources as well and it is possible that substantial unknown reserves of various minerals are still to be discovered. The systematic geological survey presently under way will help to locate reserves which can be exploited economically.

Liberia has manpower to develop its natural resources. The process of absorbing labor from subsistence agriculture into the market economy has only begun. There is major scope for employment of Liberians in positions held by expatriates.

Though an enormous task of education and training confronts us, the fact remains that for a long time to come economic growth will not be hindered because of a lack of human and natural resources.

Chapter 2

DEVELOPMENT OBJECTIVES AND POLICIES

The present Development Plan has been conceived as an integral part of Liberia's continuing program of national consolidation and unification, designed to ensure the fullest possible realization of the country's economic potential.

To this end, the Plan provides for the mobilization - during the next four years - of all available knowledge, experience, and resources for a concerted movement toward the achievement of the following long-range development objectives:

a) A steadily increasing per capita income through increased production.

b) A distribution of income conducive to long-run political stability and social justice.

c) A fuller participation by Liberians in positions of skill and responsiblity in all areas of the economy.

d) A more widespread distribution of the benefits of economic advance, to bring better and longer lives to Liberians of all regions and social groups.

e) A more broadly-based economic and industrial development through realization of the economies of scale and the increasing returns resulting from active participation in joint economic projects involving other nations of the West African sub-region.

Viewed from the standpoint of its contribution to the achievement of these objectivies, it will be seen that the Plan represents an indispensable step in Liberia's movement into the future and toward the full realization of her national destiny, as well as the individual destinies of each of her citizens.

The principal characteristics of the Liberian economy are discussed at length in Chapter 1. The economy continues to be characterized to a large extent by subsistence agriculture, and dependent upon the production of iron ore and crude rubber for export. These characteristics determine the general direction to be taken through the planning process: continuing the transformation from a subsistence to a monetary economy; decreasing dependence upon the two major raw materials through exploitation of other resources; intensifying and diversifying local agricultural and industrial efforts; enhancing economic opportunity for individual Liberians through the up-grading of skills; and encouraging Liberian entrepreneurship.

Although Liberia's economic performance in recent years has been impressive in comparison with that of other developing nations, the stage of sustained economic growth has not yet been attained. In order to speed the achievement of this stage the primary concern in recent years has been the laying of the groundwork for future economic progress - and this will continue to be the principal focus during the period of the present plan.

This is a many-side task, requiring a general broadening of the development base through a more rapid transition from a subsistence to a monetary economy, provision of the physical and social infrastructure required as a basis for this transition, and a concurrent strengthening of the quality of education and training of Liberians for participation in the overall development effort.

Progress along these lines has resulted in an ever-increasing number and variety of projects and services competing for still relatively limited resources. This situation has called for hard decisions with respect to the specific projects and programs to be included in the Plan, and has made it necessary to delay or modify a number of desirable development activities.

In making such decisions first consideration has been given to the contribution of each project or program to the long-range development objectives. Then, in selecting individual projects from among those meeting this first test, priority has been placed - other things being equal - where the most immediate returns can reasonably be expected and where effective foreign assistance is most likely to be forthcoming. In a number of cases, such as those involving infrastructural development or the provision of social services, it has been necessary to give first consideration to potential effects on long-term development irrespective of prospects for short-run return or availability of foreign funds.

It is, of course, difficult to assess the contribution to overall development of any single, specific development project, and it is certainly impossible to quantify the costs and benefits in a way that would permit the determination of a single unambiguous measure of returns. This is so partly for reasons inherent in the problem and partly for reasons inherent in the present stage of development. No satisfactory technique for comparing a road and a health clinic, for example, and arriving at a basis for choice between them has been devised. The problem is further complicated in Liberia by the gaps in the basic data necessary for full quantification.

This does not mean, however, that it is not possible to plan or make sound judgements about the relative merits of individual projects. It is possible to ascertain whether a project makes a net contribution to growth and to the achievement of other key objectives. Also, it is possible in many cases to develop a basis for choosing among closely similar projects or programs. The important thing is to be sure that the project or program contributes to growth.

With these considerations in mind, the following more specific criteria have been applied in selecting projects for inclusion in the Plan and for allocating total resources among them.

a) Increase in gross national product and employment directly and indirectly, per dollar of investment.

b) Impact on Government revenues and ability to attract foreign finance.

c) "Liberianization", through training of Liberians, creation of investment opportunity for Liberians, etc.

d) Broadening of the economic base through diversification of production which will result in increased exports and import substitution.

The Plan focusses primarily upon the public sector and the major tasks to be accomplished in this phase of development are: improved general administration, together with organization and development of specific institutions and procedures vital to future economic and social advance; new and improved transport and communication facilities; increased agricultural production through encouragement of improved techniques and provision of a more viable marketing structure; expanded exploitation of natural resources; and continuing improvement of health, educational and other social services.

Transportation development, particularly roads, is given heavy emphasis, since aside from the desirable social and political effects of improved transport, it is essential for the exploitation of timber resources and development in general.

In agriculture alone with the expansion of local food production, particular attention is given to the stimulation of new export crops.

Education and training, vital to all areas and stages of the development process, continue to receive high priority, with emphasis on improvements in quality, particularly at the secondary level.

In the private sector Government will continue its efforts to provide the necessary infrastructure and maintain an evironment congenial to private investment. Liberia will continue to play an active role in efforts to bring about economic integration in West African sub-region on a sound cooperative basis.

Specific goals are discussed in the chapters dealing with each of the individual sectors.

Chapter 3

THE DEVELOPMENT PROGRAM

This chapter is a summary of the sector development programs which are detailed in the individual sector chapters. The total size of the Development Program and the proposed distribution of its financing is shown in the following table. The budget implications appear in line (9) of the table.

The total development expenditures over the four year plan is $98 million or $24.5 million per year on the average. Plan expenditures in 1967 total about $24 million compared with actual expenditure in 1966 of about $23.5 million.[1/] It must be added that 1966 was a peek year with substantial parts of total expenditures on Mt. Coffee, the Medical Center and the Jr. - Sr. High School falling in that year. Apart from a small decline in 1969, the Program will imply a steady growth in development expenditures to about $26 million in 1970.

Although the information available for earlier periods is incomplete, such information as is available indicates that the present Plan, if implemented, represents a substantial increase in development expenditures compared with any previous period. Furthermore, the program is a coordinated and balanced increase in expenditures in the key sectors of the economy seeking an effective allocation of scarce Government resources.

1/ Since the budget accounts only for the expenditure of Government revenues these figures are not comparable to the Development Budgets as they appear in the 1966 and 1967 budgets. To the budget figures would have to be added disbursements from foreign aid in those years to arrive at the total cost of the development program.

Table 3.1

DEVELOPMENT PROGRAM AND FINANCING
($000,000)

Sources	1967	1968	1969	1970	Total
I Existing Program					
(1) Budget Appropriation ...	2.7 1/	1.8	1.8	1.7	8.0
(2) Other Domestic Sources...	-	-	-	-	-
(3) External Assistance ...	15.3	9.7	1.6	.5	27.1
(4) Subtotal	18.0	11.5	3.4	2.2	35.1
II New Program					
(5) Budget Appropriation ...	.8 1/	4.9	6.7	8.2	20.6
(6) Other Domestic Sources 2/	2.5	3.3	1.8	1.6	9.2
(7) External Assistance	2.5	4.8	11.9	13.9	33.1
(8) Subtotal	5.8	13.0	20.4	23.7	62.9
III Total Program					
(9) Budget Appropriation ...	3.5 1/	6.7	8.5	9.9	28.6
(10) Other Domestic Sources	2.5	3.3	1.8	1.6	9.2
(11) External Assistance ...	17.8	14.5	13.5	14.4	60.2
(12) Total	23.8	24.5	23.8	25.9	98.0

1/ Budget figures.

2/ Includes private sector contribution to public or semi-public investment programs e.g. the dredging of Monrovia Port the cost of which will be reimbursed by the iron ore companies (see Chapter 6) and the program to rehabilitate Liberian rubber farms (see Chapter 5).

In formulating the total Program, decisions on the allocation of resources are very important in order to secure maximun contribution for development from the very limited resources available to Government.

Table 3.2 shows the allocation of total development expenditures over the plan period between the key sectors of the economy.

Table 3.2

ALLOCATION OF RESOURCES

($000)

Recipient	Budget Appropriation	Other 1/ Domestic Sources	Ext. Assistance	$000	%
Agriculture	5,556	1,522	3,215	10,293	10.5
Transport	7,063	4,359	25,051	36,473	37.1
Communications 2/ ...	1,011	110	310	1,431	1.5
Public Utilities ...	1,790	3,257	18,880	927	24.3
Natural Resources ...	2,546	-	4,968	7,514	7.7
Education ...	5,950	-	3,157	9,107	9.3
Public Health ...	4,531	-	4,427	8,958	9.2
Other Services ...	290	-	100	390	0.4
Total Program	28,737	9,248	60,108	98,093	100.0

1/ See Footnote 2 Table 3.1

2/ See Footnote 3 Table 3.5

A breakdown of total proposed development expenditures into capital and non-capital is given in Table 3.3

Table 3.3

CAPITAL AND NON CAPITAL EXPENDITURES 1967-70

($000,000)

Program	1967	1968	1969	1970
Capital	23.2	20.6	15.6	16.9
Non-Capital..	0.6	3.9	8.2	9.0
Total Program	23.8	24.5	23.8	25.9

Some major components of the investment program compared with estimates for the period 1964-66, are shown in Table 3.4.

Table 3.4

PLAN INVESTMENT 1964-1970

($000,000)

	1964	1965	1966	1967	1968	1969	1970
School Construction	1.9	1.8	1.5	1.8	0.4	0.8	1.2
Transport Infrastructure	2.5	5.8	6.8	8.0	8.6	9.3	8.5
Health Facilities	0.2	1.0	2.5	3.8	0.9	-	-
Public Utilities	1.4	13.3	12.7	8.3	8.7	2.8	3.8
Agriculture	0.1	-	-	0.4	1.2	2.3	3.2
Other	2.4	0.5	-	0.9	0.2	0.4	0.2
Total	8.5	22.4	23.5	23.2	20.6	15.6	16.9

Tables 3.3 and 3.4 show the general approach taken in the present Plan, as described above. The years prior to the beginning of the Plan

period show relatively higher investment in education, public utilities and health. The Plan program is much more modest with respect to capital investment and emphasizes support costs in these areas. It also shows increasing capital expenditures in agriculture over the plan period.

Compared with 1965 and 1966 the proposed Development Program implies a decline in public investment. The average yearly public investment in the period 1960-1964 however, was about $14 million which is below the average level implied in the Development Program.

The present plan will thus maintain the high level of public investment experienced over the past seven years on average but public capital investment will decline over the plan period. At the same time non-capital expenditures will increase. The reason for this is that the high rate of growth in capital facilities over the last few years has not been accompanied by an appropriate growth in provisions for operational cost, with the result that many of these facilities have been operated at loss than optimum efficiency; that is, schools with insufficient furniture and teaching materials, hospitals with inadequate instruments and medical supplies, road maintenance equipment without sufficient gasoline and spare parts etc. A considerable increase in support cost is therefore considered a high priority in the present plan period rather than an accelerated accumulation of capital facilities. It is possible in this plan period to increase support costs to level sufficient to make existing capital facilities reasonably productive and at

the same time maintain a high level of public investment for the period as a whole.

Table 3.5 indicates the proposed budgetary allocation for each sector over the plan.

Table 3.5

PROPOSED BUDGET ALLOCATION FOR THE DEVELOPMENT PROGRAM
($ 000)

Program	1967 1/	1968	1969	1970
1. Agriculture & Forestry				
(1) Existing Program 2/	–	–	–	–
(2) New Programs	290	1231	1713	2322
(3) Additional Support Costs	–	–	–	–
(2) + (3) Subtotal	290	1231	1713	2322
2. Transport				
(1) Existing Programs	803	270	270	270
(2) New Programs	200	1098	1620	1560
(3) Additional Support Costs	108	398	233	233
(2) + (3) Subtotal	308	1496	1855	1793
3. Communications 3/				
(1) Existing Programs		–	–	–
(2) New Programs	34	58	43	36
(3) Additional Support Costs	–	270	280	290
(2) + (3) Subtotal	34	328	323	326
4. Public Utilities				
(1) Existing Programs	776	454	180	–
(2) New Programs	–	200	100	80
(3) Additional Support Costs	–	–	–	–
(2) + (3) Subtotal	–	200	100	80
5. Natural Resources				
(1) Existing Programs	112	171	155	160
(2) New Programs	30	184	366	235
(3) Additional Support Costs	–	382	338	413
(2) + (3) Subtotal	30	566	704	648

Table 3.5 (Cont'd)

6. Education				
(1) Existing Programs	468	294	294	294
(2) New Programs	135	300	450	600
(3) Additional Support Costs	–	429	999	1669
(2) + (3) Subtotal	135	729	1449	2269
7. Public Health Service				
(1) Existing Programs	555	642	860	977
(2) New Programs	17	69	84	107
(3) Additional Support Costs	–	213	504	499
(2) + (3) Subtotal	17	282	588	606
8. Other Services				
(1) Existing Programs	–	–	–	–
(2) New Programs	10	50	90	140
(3) Additional Support Costs	–	–	–	–
(2) + (3) Subtotal	10	50	90	140
Total				
(1) Existing Programs	2736	1831	1759	1701
(2) New Programs, Additional Support Costs	824	4882	6722	8184
Grand Total	3560	6713	8481	9885

1/ Budget figures.

2/ The plan for agriculture provides for a concentration of activity on the highest priority development programs. Beginning in 1967 existing development programs (e.g the Gbedin Rice Scheme and the United Nations Freedom From Hunger-Swamp Rice Project) have been incorporated within the National Rice Zone Program. Thus the classification Existing Development Programs carries no suggested appropriation in 1967.

3/ Increase of total appropriations (see Chapter 7) over present levels of support.

Chapter 4

FINANCING THE PLAN

The magnitude of the program presented in summary form in the preceding chapter poses a challenge to the government and people of Liberia. The government believes, however, that this challenge can be met successfully if every effort is made to achieve the necessary self-discipline, increased effort, and enhanced effieiency in the use of the resources available to us. The plan is realistic in that it can be achieved even when the financing problem is viewed against the background of present austerity and the difficult problem created by the rapid increase in debt service during this plan period. The present chapter analyzes in detail the problem of financing the plan and proposes a program of public action designed to accomplish its objectives.

As a first step in estimating resources available for development over the plan period, expected revenues from sources existing at the beginning of the plan period have been projected. The projection takes into account existing trends in revenue as well as the revenues expected from tax measures enacted at the beginning of 1967. This projection is summarized in Table 4.1, blow.

Although it is difficult to establish fixed relationships, there can be no doubt that revenues depend to a very large extent on two factors: (1) world market prices for rubber and iron ore, and (2) the level of income in the economy. The picture could of course change drastically

Table 4.1

GENERAL REVENUES 1967-1970
($000,000)

SOURCES	1967	1968	1969	1970
Direct taxes	23.0	23.8	24.8	25.0
Rubber Concessions	4.4	4.3	4.3	4.3
Iron Ore Concessions	8.9	9.3	9.8	10.0
Other 1/	9.8	10.2	10.7	11.3
Customs	19.0	20.5	22.0	23.5
Other Indirect Taxes	2.0	2.1	2.2	2.4
Vessel Taxes	2.5	2.6	2.8	2.9
Other Revenues	1.2	1.2	1.2	1.2
TOTAL	47.7	50.2	53.0	55.6

1/ Includes the Austerity Tax.

by the entrance of new large enterprises, but this has not been assumed in the forecast.

The basic assumption on which the forecast of receipts from concessions is based is a slight increase in output of rubber and iron ore, balanced by a slight decrease in their export prices. The forecast of customs revenues is based on the assumption of rising economic activity and growth in income. It is assumed that the annual growth rate will be about six percent. It is furthermore assumed that improvements in customs administration will continue and increase revenues by more than can be expected alone from increased economic actitity.

The main assumption underlying the projections of other revenues is the expected growth in income, but taxes not based on income (such as per capita taxes) are assumed constant. The forecast of vessel revenues is based on a special study.

It can be expected that the considerable improvement in administration of internal revenues will also be further strengthened during the plan period. Improvements in revenue collections with promising results are already under way or are part of the plan with respect to income taxes and real estate taxes.

The forecast, based on the tax structure and schedules in existence by the end of 1966, has been adjusted to take into account the effect of revenue measures included in the Austerity Plan. The most important of these is the Austerity Tax, which is estimated to yield $1.4 million in 1967. This figure has then been increased to reflect the anticipated growth in total payroll in subsequent years. Adjustments and increases in Motor Vehicle Fees and Registration Fees included in the Austerity Plan, are estimated to yield some $120,000 annually.

The Austerity Plan calls for an adjustment of the tariff to reduce the rate on certain commodities for which the rate was increased unintentionally because of reclassification in the new tariff schedule. This may have an adverse effect on revenues, but new efforts to control duty free privileges also included in the Austerity Plan will presumably more than compensate for this. Better control of duty free imports combined with administrative improvements already under way, are likely to increase customs revenues substantially over the plan period. It is assumed that improved administration and control will yield $0.3 million in 1967 increasing to $1.0 million in 1970 over the above what can be expected from the increase in economic activity.

To make a forecast of Government resources available for development over the plan period, it is necessary not only to project revenues but also to determine the extent to which claims against these revenues, both non-developmental and developmental, already exist. Certain expenditure items such as debt service are fixed according to agreements, and payments over the plan period are thus known. Other items are more variable and influenced by current policy decisions and hence less predictable, the most difficult being current expenditures.

Total committed expenditures have been broken down as shown in Table 4.2

Table 4.2

GOVERNMENT "COMMITTED" EXPENDITURES 1964–1970
($000,000)

EXPENDITURE	1964	1965	1966 1/	1967 2/	1968	1969	1970
Current Expenditures	30.1	32.1	35.4	35.5	37.4	38.4	39.4
Existing Development Programs 3/	.4	2.3	2.3	2.9	3.5 5/	1.8	1.7
Debt Service 4/	11.3	9.9	9.8	9.1	10.9	14.2	13.4
Transfers	.6	1.0	1.4	1.0	1.0	1.0	1.0
Accounts Payable	-	-	.3	.5	.5	.5	.5
TOTAL	42.4	45.3	49.8	49.6	51.6	55.9	56.0

1/ Estimate

2/ Budget Figures

3/ Line (1.) from Table 3.1

4/ Includes the special debt service account with an estimate of $700,000 for 1968. It is assumed that these amounts will be used to meet debt service requirements in 1969 and 1970, respectively.

5/ Includes $0.8 million for new programs starting in 1967.

"Debt Service" includes interest payments as well as repayments of principal. These payments are fixed and the existing debt service schedule through 1977 is shown in Appendix II. In the recent past "Transfers" have consisted of such items as payments to the Liberian Development Corporation, the African Development Bank and Claims (payments on debt incurred by the Government for purchases of land, etc.). The transfer item is less predictable than debt services; however, the $1 million provided in the 1967 budget is carried for each year of the plan period. The high figure in 1966 is due to a non-recurring capital subscription of $450,000 to the African Development Bank. "Accounts Payable" are payments on outstanding unpaid bills. The total of outstanding bills has been estimated at $3 million for payment of which $500,000 is provided in the 1967 budget. This figure is carried for the rest of the plan Period. "Existing Development Programs" represent Government contributions to implementing such programs and provisions for operating costs when construction is completed. Since these are high priority projects already under way at the beginning of the plan period, necessary funds should be provided for them before new projects are undertaken.

The difference between total expenditures and the items described above is "current expenditures". While it is true that almost all Government activities contribute to the development of the country in the long run, some activities are more directly related to growth and development

than others. It is a key element in the planning process to try to identify and separate these "development activities" and to increase their share of total Government expenditure. This does not necessarily mean that other activities, referred to as "Non-development activities", will have to be cut back, but it does mean a much more rapid increase in the former than in the latter. For the purpose of forecasting resources available for new spending, it is assumed that policies necessary to restrict the increase in "non-development expenditures"are adopted and that this will keep the increase in these expenditures to not more than $1 million annually. This amount is substantially less than the actual increase in the last few years. Part of the increase between 1964 and 1965, however, can be explained by an extraordinary increase in personnel costs within the Department of Education and for 1966 above 2/3 of the increase was due to payments to the African Development Bank, gold purchases, cost of coinage, loss on silver 1/ and increase in rent payments.

In order to keep increases in non-development expenditures to a minimum it is recommended that every effort be made to: (a) avoid the creation of new positions (b) fill existing vacancies or grant salary increases only in those cases necessary for increased efficiency or the achievement of planned objectives and (c) achieve savings in foreign travel and subsistence allowances, Government rents, and diplomatic representation abroad, where these will not

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1/ Cost of coinage as well as loss on silver was more than offset by the value of the coins, totalling $1.5 million. This amount is included in 1969 revenues in Appendix I.

adversely affect efficiency or the national inrerest. If the policy of restricting growth in personnel costs in general is accepted, there will be room for small increase in support costs, which will correct the present imbalance between the two budgetary categories and greatly improve efficiency.

Further improvements in efficiency can be obtained if new administrative activities required by the Development Program are effected by transfer of personnel and costs from lower priority activities within the various departments and agencies.

Moreover, the total resources available to the Government to finance development depends not only on the funds that can be appropriated for development from Liberia revenues, but also on the amount of foreign aid that can be obtained. The amount of foreign aid that can be obtained, in turn, is a function, in part, of the domestic resources that can be devoted to development. Almost all foreign aid projects require financial contributions by the Government of Liberia in their construction phase and the expected ability of the Government of Liberia to sustain the recurring costs implicit in the operating phase. Thus a continued and improved expenditure discipline over the plan period is doubly necessary: to free Liberian resources for high priority development uses, and as the basis for attracting a continued inflow of foreign assistance.

It is clear from Tables 1.1 and 3.1 that the Government will not be able to meet its commitments, and much less to undertake any new development programs, from the anticipated growth in general revenues.

It is thus indispensable for the Government in order to implement the plan to increase the inflow of external assistance. It is recognized that this is possible only if the Government is able to increase local resources as well. Table 3.1 summarizes expenditures of the minimum development program proposed in the present plan. Expenditures on new programs will increase from $5.8 million in 1967 to $23.7 million in 1970. It is estimated that the part of total expenditures which will have to be financed out of Government resources will increase from the $0.8 million included in 1967 to $8.2 million in 1970. Although the Government intends to increase revenues substantially (see below) it is estimated that the budgetary deficit will increase. The expected deficit in 1967 of $1.9 million is expected to be covered by drawings on the IMF as well as other general budget support. A continuation of this external budget support and a temporary debt service relief in 1969 and 1970 is a precondition for implementation of the Plan.

Table 4.3 shows a projection of the estimated budget deficit on the basis of existing revenue policies and the assumption of no external budget support over the Plan period.

Although IMF standby as well as PL 480 and commodity loans may be difficult to secure at the levels presently assumed, these levels are necessary to the success of the program. A persuasive case can be made for them if every effort is made to assure that our investment program is sound, our tax effort substantial, and our expenditure discipline continually improving.

The major semi-public and public corporations are Public Utility Authority (PUA), the Free Port of Monrovia and the Liberian Produce Marketing Corporation (LPMC). An estimate of the debit and credit items of the clearing account between Government and the PUA has been

Table 4.3

ESTIMATED BUDGETARY DEFICIT: 1967-1970

PROJECT	1967 1/	1968	1969	1970	TOTAL 1967-70
Committed Expenditures 2/	49.6	51.6	55.9	56.0	213.1
New Development Programs 3/	-	4.9	6.7	8.2	19.8
TOTAL GOVERNMENT EXPENDITURE	49.6	56.5	62.6	64.2	232.9
General Revenue 4/	47.7	50.2	53.0	55.6	206.7
Public & Semi-Public Corporations (Contributions to General (Revenue)	-	.7	2.5	2.6	5.8
Additional Revenue 5/	-	3.0	3.3	3.5	9.8
TOTAL GOVERNMENT RESOURCES	47.7	53.9	58.8	61.7	222.3
Deficit	1.9	2.6	3.8	2.5	10.8

1/ Budget figures. The deficit in 1967 is expected to be covered by IMF Standby and other external budget support.

2/ From Table 4.2

3/ From Table 3.1 See however foot-note 5 of Table 4.2

4/ From Table 4.1.

5/ To be obtained by various fiscal measures. See below.

made, giving a surplus of $4.9 million over the plan period in the Government's favor. Payments from the Free Port of Monrovia are estimated at $0.9 million over the four-year period based on the assumption that the port dues are revised along the lines proposed by the Department of Planning and Economic Affairs. With respect to LPMC it is proposed, as part of the agricultural plan, that certain agricultural development projects be undertaken by that Corporation and financed out of retained earnings. Also PUA and the Free Port of Monrovia will finance part of their development programs in addition to the estimated payments to the Government indicated above.

Since serious efforts in development will require some additional revenues, tax policy and tax administration in general should be geared to the task of development. Although the following is not intended to be a review of the entire tax system in the context of development, it points out certain changes in the system that would be conducive to economic development in general and generate additional revenues without adversely affecting the economy.

The most important task during this plan period should be the strengthening of the administration of existing taxes rather than the introduction of new taxes. We may possibly be approaching the limits of domestic taxable capacity, at least on low incomes and small businesses. This possibility is suggested by evidence that some new taxes have caused declines in the revenues generated by closely associated

taxes, such as the education levy and the hut tax. Any changes in the existing tax structure should aim at achieving a simplification of the whole structure and reduce the number of separate taxes. The various taxes collected on a per capita basis, for instance, could be consolidated into one general per capita tax, with a resulting simplification of administration. Since improved tax administration is a long-run process, the resulting additional revenues over the plan period will not be sufficient, and new taxes and/or changes in schedules and rates of existing taxes will be necessary. The following paragraphs discuss both the proposed administrative changes and additional tax proposals.

There seems to be scope for increased revenues through a general revision of the income tax along the following lines:

a) reduction of the statutory exemption of individual income from the present $1,500 to $1,000 or even lower. This would mean a broadening of the tax base. There are large number of persons earning close to $1,500 annually who, under the present law do not pay income tax.

b) revision of the rates so as to increase rates on middle and upper income brackets, while maintaining the rates on low brackets. Since the total tax burden is relatively high on the lower brackets because of the per capita taxes, this would increase equity.

c) revision of the income tax schedule in such a way that the increase in tax burden on Liberian citizens would be equal to the Austerity Tax. A replacement of the Austerity Tax with a revised general income tax would have at least two advantages: first it would simplify administration and secondly, the increase in tax burden would fall equally on Liberian citizens and expatriate residents.

d) removal of the allowed statutory exemption on partnerships as entities. Since each individual partner enjoys a personal exemption, the present law permits a double exemption,

e) revision of the rates on lower brackets in the corporate income tax schedule. There is also scope for considerable increase in revenues by further improvements in administration;

f) provision for reporting information of payments at source and increased appropriations for accounting, processing and especially auditing tax returns,

g) imposition of an income tax on income earned by non-resident aliens from Liberian sources as is the practice in almost all countries.

In the area of customs duties the following opportunities for increasing revenues have been identified:

a) The current tariff has been subject to numerous modifications and although a general increase in rates cannot be recommended, several improvements consistent with development objectives could be made. First, it is common to find rates on finished products which are lower than those applied to raw or semi-manufactured materials used in making such finished products. This is a disincentive to greater industrial activity in Liberia. Second, rates on some luxuries and non-essentials are still comparatively low. On the other hand, rates should be lowered on some common wage-bill goods with a resulting decline in prices on these commodities.

b) Customs exemptions should be rigidly controlled. In concession agreements, exemptions should be clearly defined to include only items that are directly necessary for production. This should apply also to Government contractors. Duty free privileges to foreign embassies, missions and internationsl aid organizations, etc. might be reconsidered, with a view to reduirg exemptions to a reasonable level.

c) Increased support of the Bureau of Customs, in the form of increased appropriation for training and for higher salaries. The need for more qualified personnel is the most important single problem and an expansion of the training program should be considered. Also, selective increases in salaries will be necessary to attract candidates with higher educational levels.

As regards other revenues, the following proposals are made:

a) Motor Vehicle Tax
The number of gratis licenses should be reduced and license fees revised.

b) Real Estate Taxes
Every effort should be made to enforce collection of the existing real estate tax. To achieve this goal it is essential to identify the ownership of all property. In this connection, the cadastral survey described in Chapter 9 will play a key role in the proper description of property boundary lines within urban areas.

c) Public Service and Public Corporation Revenues
Studies identifying increased revenue possibilities from public services and corporations should be implemented.

d) Concession Revenue
The special tax agreements with the concessions should be reviewed to determine the extent to which Government revenues from this source could be increased without violating the Open Door Policy or adversely affecting the relative attractivness of investment incentive.

e) Investment Incentive
Double Taxation agreements should be negotiated with all countries whose nationals have made substantial investments in Liberia. Tax holidays should not be granted to investors whenever double taxation treaties or the existing tax laws of the relevant foreign countries permit offsetting of taxes paid in Liberia against taxes that would otherwise be paid in the investor's home country.

In view of the fact that deficit will increase substantially in 1969 and that this is largely due to considerable increase in debt service, it seems legitimate to investigate the possibility of a partial rescheduling of the public debt. It is suggested that the reduction in debt service to be sought through such a rescheduling be approximately $3 million in each of 1969 and 1970. This would reduce the total deficit over the plan

period to $4.8 million or about $1.6 million per year on average. This is the residual deficit that must be covered in 1968-1970, by measures additional to those already proposed above.

Without a rescheduling of the debt it will be difficult to make these investments which will increase our long-run capacity to meet our obligations. The present debt service schedule will place an intolerable deflationary burden on the economy, especially if we cannot mount an offsetting level of expenditure of the size proposed in the Plan. This schedule was predicated upon price assumptions for rubber and iron ore which were not realized in the subsequent years and we have, in spite of this, maintained a good payments record to date. Also our record on raising increasing amounts of resources (the "self-help criteria") is good.

A major part of our development, up to the present, has been financed by foreign assistance. Part of this assistance has consisted of contributions to the cost of specific construction projects; the remainder has consisted of technical assistance and program aid. The continuation of such assistance is essential to the implementation of the Plan. In addition to a continuation of existing projects, the Plan calls for several new development programs, which can be carried out only if foreign sources can be found as part of the total finance. Description of these programs together with total estimated cost and the most likely source of external finance are described below in the chapters on each sector.

Based on past experience with different types of projects and different donor countries, the distribution of total finance between Government, other domestic sources, and external aid has been estimated. A summary of the result is shown in Table 3.1. The Development Program proposed in the Plan contains a number of elements which by their nature are not suitable for foreign aid. However, the program is large enough to attract a substantial amount of foreign aid.

It must be borne in mind, however, that only a minor part of the anticipated external aid has yet been obtained and although the estimates are based on present policies in the donor countries, it may very well be increasingly difficult to obtain foreign aid in the future, since indications are that many sources are tightening up on their development assistance.

Appendix I

PROJECTION OF GOVERNMENT REVENUES

1967 - 1970

($000,000)

	CODE & TAX SOURCE	1965 Actual	1966 Actual	1967 - Forecast	1968	1969 -	1970 -
	1. Direct Taxes on Individuals						
113	Income Tax	1.32	1.36	1.58	1.67	1.76	1.86
131	Lease Tax	38	.37	.42	.45	.48	.51
451/56	Hut/Per Capita Taxes	.73	2.08	2.00	2.00	2.00	2.00
457	Education Levy	1 .31					
411/13	Real Estate Taxes	.26	.27	.60	.72	.84	.96
	Austerity Tax	-	-	1.40	1.48	1.57	1.66
	Subtotal	4.00	4.08	6.00	6.32	6.65	6.99
	2. Direct Taxes on Crops						
ex 111	Rubber Concessions	4.26	4.26	4.26	4.26	4.26	4.26
ex 121	Iron Ore Concessions	8.00	9.18	8.85	9.15	9.65	9.85
ex 111/12	Other Corporations	1.60	1.22	1.80	1.91	2.02	2.14
42/425	General Licenses Taxes	1.19	1.13	1.39	1.47	1.56	1.65
(1)	Export Duties/Stumpage Taxes	.65	.85	.66	.68	.70	.72
	Subtotal	15.70	16.64	16.96	17.47	18.19	18.62
(2)	**3. Customs Revenues 2/**	16.48	18.27	18.99	20.49	21.96	23.51
(3)	**4. Other Indirect Taxes**	1.53	1.75	2.00	2.12	2.24	2.36
(4)	**5. Public Service Revenues**	.65	.74	.69	.71	.73	.75
470	**6. Vessel Revenues**	3.82	2.58	2.53	2.53	2.77	2.89
(5)	7. Miscellaneous Non-Tax Revs.	.47	1.80 1/	.47	.47	.47	.47
	Subtotal (4-7)	6.27	6.87 1/	5.69	5.95	6.21	6.47
	Grand Total	42.45	45.86 1/	47.65	50.23	53.01	55.59

(1) 132,215, 251, 494
(2) 211/14, 218/22, 255/59
(3) 440, 430, 485
(4) 330, 252/54, 498
(5) 418, 84, 491/93, 495, 499

1/ Includes coinage of $1.50 million.
2/ Assumes further improvements in customs administration.

Appendix II

DEBT SERVICE FORECAST 1966-1967
($000,000)

		Principal Outstanding at end 1965 1/	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	Principal payable after 1977
Eximbank	P	29.3	-	-	-	3.5	3.5	3.5	3.4	3.4	3.1	2.7	2.5	2.2	1.5
	I		1.5	1.6	1.6	1.6	1.4	1.2	1.0	0.8	0.6	0.5	0.3	0.2	
USAID	P	49.5	-	-	-	-	-	-	-	-	1.0	1.3	1.3	1.6	44.3
	I		0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	
Other Official 2/	P	39.8	0.5	0.5	1.1	1.2	1.4	1.6	2.0	2.1	2.1	2.2	2.1	2.2	20.8
	I		0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.4	-
Commercial banks	P	11.3	0.1	-	0.9	1.8	1.8	1.9	1.0	1.4	2.4	-	-	-	-
	I		0.6	0.6	0.6	0.5	0.4	0.4	0.2	0.2	0.1	-	-	-	-
Other Private	P	43.0	2.7	2.4	2.9	4.2	4.3	3.8	3.4	3.2	4.0	4.1	4.1	3.7	0.2
	I		2.8	2.6	2.6	2.3	2.1	1.9	1.7	1.5	1.3	0.8	0.6	0.2	
TOTALS	P	173.0	3.4	2.9	4.9	10.8	11.0	10.8	9.8	10.1	12.6	10.3	10.0	9.7	66.8
	I		5.8	5.9	5.8	5.5	5.0	4.6	4.0	3.5	3.0	2.3	1.8	1.1	
	P + I		9.2	8.8	10.7	16.3	16.0	15.4	13.8	13.6	15.6	12.6	11.8	10.8	

NOTE: Includes repayment on all debts outstanding or committed as of end 1965. Figures after 1970 approximate. $250.00 in bank charges are estimated for each year.

1/ Includes undisbursed portions of some loans.

2/ Excludes repayments to IMF.

SOURCE: 1960-70 Treasury schedules. 1971 - SM/64/20, Table 9, adj. for new loans since 1963. (F.C. March 1966)

SOURCE: 1960-70 Treasury schedules. 1971 = SM/04/21, Table 3, adj. for

Chapter 5

AGRICULTURE AND FORESTRY

Although almost 80 percent of the population of working age is engaged in agriculture and forestry, this sector in 1964 accounted for only $38 million or 18 percent of gross domestic product of which rubber alone contributed $25 million.

One fundamental measure proposed in this Plan for the development of agriculture and forestry calls for increased budgetary support of the Department of Agriculture. The budget of the Department of Agriculture, unlike that of many other Departments, has scarcely increased in recent years. In 1966 out of total revenues of $45.9 million the Department received an appropriation of about $1 million.

Another measure calls for enlisting greater participation of highly productive and successful concessions and Liberian farmers in the implementation of agricultural development programs.

I. General Objectives

The specific programs of this Plan are designed to contribute to the following lone-range objectives in the fields of agriculture and forestry:

a) To encourage the introduction of new export cash crops to diversify agricultural exports and increase income and employment opportunities for Liberians.

b) To reduce the impact on Liberian farmers of price declines for their export products in international markets through domestic policies and programs designed to promote increasing quality and productivity.

c) To stimulate local production of basic dietary staples in keeping with effective demand for such products.

d) To promote local processing of the products of our fields and forests.

e) To foster the production of local raw materials necessary for industrialization.

II. Plan Goals

Consistent with resources available, the Plan calls for efforts to be focussed in a relatively limited number of areas. Over the Plan Period, personnel and resources of the Department of Agriculture will be concentrated accordingly. Programs for achieving the Plan goals and provisions for their financing are described later in this Chapter.

With limited exceptions activities will be focussed generally on the following crops or areas:

Rice

Major effort will be made to encourage local production of rice to substitute rapidly rising rice imports. Improving production and processing techniques, both in the case of swamp and upland rice, and insuring a market attractive to local farmers will form the basis of this program.

Tree Crops

Attention will be concentrated on the following tree crops:

Rubber: Incentives will be provided to encourage Liberian rubber farmers to replace uneconomic low yield trees with new improved high yield strains. Arrangements will be made for small inefficient farmers to cooperate in joint management, processing and transport arrangements.

High Yield Oil Palm - A minimum of two additional 7,500 acre core plantation projects each including a modern oil mill, will be established. The Oil Palm Advisory Service will step up its activities including the sale of high yield palm seedings to private farmers at cost. Technical advice on planting and processing will be widely offered. Small oil mills will be established in areas having extensive wild palm stands and/or adequate number of high yield palm trees.

Coffee - Sales of Liberian coffee to signatories of the International Coffee Agreement are now limited to 1,100 tons. An increase in this quota will be sought to avoid hardships on a predominatly small holder cash crop. Small farmers will be encouraged to replace sub-standard trees with assistance of personnel of the Liberian Produce Marketing Corporation. A demonstration plantation and nursery for the distribution of seedings will be established.

Copra - Efforts will be made to introduce high yield coconuts in appropriate areas. The feasibility of processing copra from existing groves will be studied in conjunction with the introduction of plantings of high yield coconuts as a new cash crop.

Forestry

The increased utilization of forest resources consistent with scientific management practices will be encouraged. Main transportation infrastructure, including roads, rail and improved port facilities will be geared to support this effort. Special effort will be made to attract investment in the processing of Liberian forest products, particularly plywood, chip board and core veneer.

The Bureau of Forestry of the Department of Agriculture will focus its efforts on the following activities: supervision of logging operations to increase public revenue, protection of national forests from encroachment by slash and burn farming and development of a forestry concession policy designed to advance economic utilization.

Animal Husbandry

Domestic production of meat will be stimulated by programs designed to introduce better breeding animals and improve husbandry methods for cattle and swine among local farmers.

Tobacco

The production of wrapper tobacco, introduced recently as the result of initiative and research carried on by the Department of Agriculture, is increasing. Two private companies are now exporting high quality wrapper. In the light of progress in the development of this new cash crop efforts will be made to interest and support additional private investment in this crop.

Fruits and Vegetables

Fruit - Further expansion of citrus production and pineapples will be encouraged consistent with identification of specific export and domestic markets.

vegetables - The production of vegetables for the local market has been substantially increased under the stimulus of Operation Production. Emphasis during the Plan will focus on improved transportation and marketing arrangements oriented toward major centers of population. Removal of marketing bottlenecks will result both in lower prices to consumers and greater incentive to vegetable production.

Within the context of the major priorities listed above, provision will be made for appropriate supporting activities including credit, marketing, the support of cooperatives or other producers' associations and research. Extension services will be focussed exclusively on top priority programs. Arrangements will be made to design and finance an agricultural land use survey.

Plan Programs

During the Plan period, attention will be focussed on the following:

Rice: Rice imports presently total 40 thousand short tons annually and are increasing about 5 thousand tons per year. Liberia spent $6 million on rice imports in 1966.

The average farmer realizes a yield of some 500 pounds of clean rice from an acre of upland cultivation. This is accomplished by using traditional techniques. At prices

ranging from 4 to 7 cents per pound, his gross income per acre is $20-$35, which is a weak incentive to greater production.

Low productivity is the result of a number of factors including; use of low yielding varieties; damage by insects, birds and animals; inefficient harvesting and processing; and in some cases use of depleted or inappropriate soils. Solutions to some of these problems have already been developed.

The Department of Agriculture will spearhead efforts on two main fronts to stimulate increasing rice production:

a) Public Program - Undertake the introduction of scientific swamp rice cultivation in selected zones. This cultivation, already successfully tested, has resulted in yields of 2,500 lbs. of clean rice per acre. High yield varieties developed with the assistance of experts from the United Nations and the Republic of China have already been selected and are available for use in this program.

The program will be initiated in carefully selected zones chosen for suitability of swamps and receptivity of local farmers to innovation. The Department of Agriculture will facilitate the initial preparation of swamps by local farmers through the use of mechanical equipment. Each zone will have a trained rice extension staff working directly with the interested farmers. During the plan period, zones will be established in Nimba, Lofa, Bong and Grand Gedeh Counties.

b) Private Activity - At the request of the Department of Agriculture the large companies operating in the country have agreed to determine the technical and economic feasibility of large scale mechanized upland rice production. In addition, USAID has agreed to provide a special investment guarantee for a multi-purpose project including rice, cattle and soy bean which will be carried out by the Liberian Agricultural Company, a subsidiary of UNIROYAL.

If results of these pilot projects are favorable, Government will encourage private domestic and foreign capital to contribute to national self-sufficiency in rice by commercial upland rice production, complementary to the swamp rice program. These projects will also provide

improved varieties of upland rice and methods of cultivation, suggested fertilizer applications, disease control measures, etc. This information will be channelled to farmers through the rice zones program.

Rubber - The problem confronting Liberia's major agricultural export commodity may be summarized as follows: declining world rubber prices and about one fifth of the 140,000 acres owned by Liberian growers consisting of old, low-yielding rubber trees which must be replanted to remain internationally competitive. Poor management practices reduce further the productivity of this important local industry. In contrast, most foreign concessions and leading Liberian planters have consistently increased their productivity through replanting, the introduction of labor saving techniques and improved handling and processing.

The Department of Agriculture and the Liberian Rubber Planters Association have decided to seek jointly the solutions to the crisis facing the industry. Working groups composed of industry and Government representatives are presently seeking agreement leading to the establishment of a new, permanent, autonomous institution with responsibility for actions on national rubber programs.

Activities under this program will include technical assistance, management and other training, distribution of high yield scions, etc. Expert will be drawn from leading rubber estates and concessions and

from external sources. A credit scheme is necessary to assist local planters to replant using high yield clones. A rubber development fund to finance the operations of the program has been suggested.

Preliminary estimates of the cost and scope of this program are as follow:

Table 5.1

RUBBER PROGRAM-ESTIMATED COST

($ 000)

	1968	1969	1970
General Services	$ 150	$ 160	$ 180
Credit for Opening Existing Rubber Groves	160		
Credit for Replanting	100	200	340
Total	$ 410	$ 360	$ 520

SCOPE OF RUBBER PROGRAM

(acres)

Opening Existing Rubber Groves	15,000	10,000	10,000
Replanting	2,000	3,000	5,000

During 1967 a working group comprising members of the Liberian Rubber Planters Association and Government representatives will present the Association and Government with a recommended programe including proposals for financing. The target year for establishing the new institution is 1968.

High Yield Oil Palm - The introduction of high yield oil palm was accomplished by the National Production Council, now incorporated

within the Department of Agriculture. An Experimental project in Grand Bassa County was the catalyst to the establishment of the first high yield oil palm plantation in the nation. This is a private investment project expanding the initial Government pilot project to a 7,500 acre commercial plantation at an investment of $7 million. This private plantation, under the terms of its concession agreement, is committed to encouraging Liberian farmers to establish satelite farms through the provision of technical assistance and the distribution of high yield seedings.

A second 7,500 acre project is scheduled for Maryland County as a public project. A loan request is now under preparation in cooperation with the International Bank for Reconstruction and Development and the French Institut de Recherches Pour les Huiles et Oleagineur (IRHO), the leading world authority in oil palm research and development. The $7 million IBRD-Maryland County Project is designed to spread this new export crop to the Southeast Region. Consideration is also being given to a third 7,500 acre core project, along the new Kle-Pujehun Road in Grand Cape Mount County.

The favorable prospects for edible oils in the world market and the increasing demand for oil in the domestic market justifies the expansion of the Oil Palm Advisory Service of the Department of Agriculture which distributes high yield seedings and advises Liberian farmers in correct planting and care of high yield Palm. Plans are under way to establish hydraulic oil

mills with the assistance of the Liberian Produce Marketing Corporation, to process palm fruits from new private Liberian plantations and from wild palms.

Coffee - It is necessary to ensure an adequate market for the coffee crop. Virtually all western markets are controlled through the International Coffee Agreement and Liberia not being a signatory of this agreement has been assigned a low quota of 1,100 tons annually. Efforts must be made to increase the size of this quota through membership in the International Coffee Agreement.

In Liberia coffee is a main cash crop of small holder agriculture, centered principally in Lofa County. This crop continues to be economically attractive to small family farms. Existing production and processing techniques can still be improved, thus increasing economic rewards from coffee cultivation. Emphasis during the Plan will be on replanting as well as improved production and processing techniques to be carried out by the Liberian Produce Marketing Corporation. A demonstration estate and 20 village demonstration plots will be established.

Copra - Reconnaissance surveys suggest that the sandy dune areas of Liberia and other zones inappropriate for high yield oil palm or other cash crop are suitable for coconut production. A feasibility study of high yield coconut cultivation is proposed. If the results are positive this will serve as the basis for seeking international financing for the introduction of this new cash crop.

Forestry - To date only modest progress has been made in the exploitation of Liberia's tropical hardwood forest. The national forest inventory recently completed by the Department of Agriculture with the aid of the German Forestry Team indicates among other facts that of a total of 8 million acres in forest, only some 1.5 million acres are readily accessible to existing transport facilities and only 0.6 million acres are under logging operations.

The great potential of the Liberian forests has yet to be realized. Annual production in 1966 was 18.3 million board feet, of which 5.6 million board feet were exported as roundwood. Government revenue from forest exploitation averages a mere $80 thousand annually. Imports of cheap soft-wood as well as finished and semi-finished wood products has been estimated at 8 million board feet.

The principal barriers to greater activity include: weak links in the national transport network and limited international acceptance of the more abundant species of Liberian hardwood.

It is expected that the completion of the Tchien-Greenville and Tchien-Harper roads, improvements to the Greenville and Harper ports and the opening of the LAMCO railway to commercial traffic will provide sufficient stimulus for commercial production of wood and wood products to increase to 40 million board feet annually by the end of the Plan.

Animal Husbandry - Protein consumption is low in Liberia. Imports of meat and meat products in 1966 amounted to $1.6 million. Even

the single modern slaughter house in the nation processes imported animals. These imports, because of the high prices, are to a large extent consumed by those in the high income brackets, principally non-Liberians. The protein content of the diet of the majority of the people continues to be low.

Local farmers have limited herds of cattle, swine and goats which are periodically subject to depletion by diseases. In addition, feed is expensive. Only commercial poultry raising egg production have made significant progress in recent years. Imports of eggs and poultry have declined sharply.

A program for the stimulation of meat production will be developed. This program will be based on a feasibility study, taking into account the results of the cattle raising experiments to be carried out by the Liberian Agricultural Company (see Rice, above). Special attention will be given to the possibility of centering cattle raising activities in the traditional cattle raising zones. A program to this end will be prepared and submitted to Government. External assistance will be sought to aid in the preparation of and implementation of this program. Further efforts will also be made to interest major agricultural companies in cattle raising.

Fruit and Vegetable - The main bottleneck to increased production of fruit and vegetables is the lack of adequate marketing facilities. With a few exceptions, existing transportation and markets are unable to efficiently handle the production of fruit and vegetables of local farmers.

Relief from current marketing problems combined with selective measures to stimulate increased production is priority activity. Special efforts will be made to interest private investors in the establishment of large scale pineapple cultivation for the export market with a view of providing outlets for small producers. The Liberian Development Corporation and the Liberian Produce Marketing Corporation will cooperate in this effort.

Improved marketing facilities will be established (see Marketing, below). The Department of Agriculture will continue its vegetable seed distribution program giving special emphasis to distribution of known disease resistant varieties.

Agricultural Credit Corporation - The need for credit in such priority areas as rubber, rice and oil palm is very urgent. The fledgling Agricultural Credit Corporation, originally created as an autonomous body and now incorporated within the Department of Agriculture, has been beset by serious problems. As an autonomous body it had inadequate financing and staff to evaluate loan requests, supervise credit extended and assure collection of loans when due. Although the subsequent use of technical staff of the Department of Agriculture somewhat improved the supervision of credit, the corporation continued to operate with difficulty. Loans were unpaid, collection efforts through legal action were largely ineffective. Concurrently, additional loan capital was not forthcoming nor was adequate provision made for the overhead requirements of this credit institution.

The pressures of continued financial stringency and past experience

suggest that the insititution should be reorganized along lines which will ensure effective use of scarce capital. Consolidation with another credit institution could reduce the overhead burden. Technical assistance in this area is available through USAID and the German Government. A commercially sound plan of operations is necessary to support efforts to mobilize local and international capital contributions. It has been estimated that modest support of agriculture and forestry would require loan disbursements of $600 thousand by the end of 1970 in addition to administrative expenses.

Government will earmark $100 thousand in 1968 and 1969 and $250 thousand in 1970 as a counterpart contribution to the capital fund of a reorganized and reactivated Agricultural Credit Corporation. A detailed plan including required staffing, a proforma budget and plan of operations will be prepared in support of a request for external capital assistance. The Department of Agriculture will avail itself of technical assistance from USAID and the German Government in making the plan. The possibilities of consolidation with the Liberian Bank for Industrial Development and Investment will be explored.

Marketing - Export Production: The internal market for export commodities must, of course, reflect the state of the world market for these products. Within this limit there is a considerable range for public policy designed to aid and encourage local producers to increase productivity and quality and thus improve the state of our export economy.

The exclusive right to export coffee, cocoa, and palm kernels is granted to the Liberia Produce Marketing Corporation (LPMC). This is a semi-public corporation managed by the East Asiatic Company of Denmark. Distributed profits from LPMC operations are shared by the Government and this firm. In 1966 a profit of $900,000 was realized from the export of the above-mentioned commodities, of which $600 thousand was distributed.

During the Plan period the LPMC, under Government's instruction, will prepare a detailed program for the improvement of marketing of export commodities. This will include appropriate projects for: Providing incentives to producers meeting established quality standards, the encouragement of cooperative and local farmers associations, official authorization of buying agents under established rules of operation and other measures designed to improve markets of export commodities for local farmers.

Effort will be extended to seek additional assistance through the United Nations and USAID in the identification of specific export markets for Liberian fruits. A program to stimulate production for identified markets will be developed.

Local market: Production for the domestic market is handicapped by the rudimentary development of adequate wholesaling services able to handle large quantities of fruits, vegetables and other commodities. The limited public market facilities in the population centers are becoming increasingly crowded, unsanitary and inefficient.

The Department of Agriculture with the direct support of the Liberian Development Corporation and the LPMC will steady the marketing arrangements available to domestic products of fruits and vegetables. Recommendations to Government will be made for an appropriate program including financing, designed to: improve farm to market transportation, stimulate development of local wholesalers in major markets, provide adequate storage facilities and improve the public market system.

Agricultural Extension - During the Plan, emphasis will be given to the mobilization of extension staff in support of highest priority agricultural programs. Selected extension staff will be given specialized in-service training at the joint College of Agriculture and Forestry/Department of Agriculture training center. They will be assigned to work in the specific programs for which they have been trained. This in-service training will be supported by external aid already agreed upon and incorporated within the support of the College of Agriculture and Forestry by the United Nations.

Twenty-four extension workers for the existing staff will receive specialized training each year and be assigned to a specific agricultural development program.

Agricultural Research - Extensive research has been carried out at the Department's Research Station at Suakoko. Special efforts will be made to make this information available to farmers through the rice and other agricultural development programs. Experts of the College of

Agriculture and Forestry, Research Station staff and private concession technicians will review the research material now available. They will identify specific research projects where additional work is required to support Plan development programs. It is proposed that a Research Board be created, with members from the previously identified agencies in addition to representation from private firms active in agriculture and forestry. This Board would recommend allocations for specific research activities. A research plan in animal husbandry, agronomy and horticulture including detailed project proforma budgets will be submitted for consideration of the Research Board. The program will indicat specific priority activities to be undertaken within the funds earmarked for research in this Plan. Additional research projects will be carried out through external aid and by cooperating private concessions.

Agricultural Cooperatives - A limited number of farmers' cooperatives are already active in the country. These include a poultry raisers cooperative which is engaged in joint purchase of feed and supplies, a rice growers cooperative at Gbedin, a cooperative operating a mechanized coffee huller and a cocoa growers cooperative which jointly processes and sells the produce of members' farm. The two oldest cooperatives, poultry raisers and rice growers, have both benefited from Government support and initiative.

The expansion of the cooperative movement requires special assistance. Guidance is needed in the principles of cooperative organization, management and accounting. A source of credit on reasonable

terms would give further impetus to the movements.

Public programs in support of producer cooperatives may be direct or indirect. One important indirect measure would be the recognition of cooperatives as authorized buying agents of the Liberian Produce Marketing Corporation.

The formation of producers cooperatives will be encouraged. A special training program will be established for training cooperative leadership. Priority will be given to cooperatives supporting the major development programs of this Plan.

Land Use Survey - The continuing expansion of the transport network brings increasing demand for soil, hydrological, meteorological, and other related information. This need is only partially met by the small soils laboratory at the Suakoko Research Station.

It is proposed that international assistance be sought in the design of a national land use survey. This proposal, on evaluation and acceptance, would be financed mainly through external assistance. Contingent provision has been made in the Plan to cover counterpart expenses required for this Project.

General Administration

Apart from the development programs described above there are a number of other activities and division in the Department of Agriculture for which proper budgetary provisions have to be made.

These include the Central Office, Home Economics, the Gbedin and Maryland Projects, Operation Production, the Zoological Gardens, Marine Fisheries, Veterinary and Quarantine Services, the Swamp Rice Project and the National Production Council.

It is proposed that the staffing required to bring into operation the programs under this Plan will be assembled through a gradual reorganization of the Department. The Rubber Advisory Service will be transferred to a proposed autonomous Rubber Development Institute. The present staff of the Agricultural Credit Corporation unit will be absorbed in the planned reorganization which is required to make the Corporation operational.

Personnel of such units as the Extension Service, Home Economics, the Swamp Rice Project, the Maryland Resettlement Project, will gradually be totally absorbed into development programs. When this process has progressed adequately the various activities will be regrouped into a more manageable administrative structure based on programs rather than functions. As other Departmental activities are reduced in favor of the development programs, the cost of these activities will decline.

Plan Expenditure on Agriculture and Forestry

It is anticipated that expenditure of Agriculture and Forestry will increase substantially over the Plan. This is consistent with the development priority assigned to this Sector. Total planned expenditure from

all sources (Government Appropriations, other Domestic Sources and External Financing) between 1967 and 1970 inclusive will be $12.1 million. Of this total, direct Government Appropriations are estimated at $7.6 million. Early effort will be made to increase external financing from the current estimate of $3.2 million. This figure does not include external aid in the form of technical services.

It will be noted from Table 5.2 that a number of development programs have been given a contingent allocation. In the case of these programs the final determination of feasibility or the decision to proceed is yet to be made. Two key supporting services or functions, credit and marketing, require careful consideration leading to basic policy decisions and implementing measures.

Table 5.2

AGRICULTURE DEVELOPMENT PLAN 1967 - 1970

($000)

DEVELOPMENT PROGRAMS	1967			1968			1969			1970			TOTAL		
	Govt. Appropriation	Other Domestic Sources	External Financing	Govt. Appropriation	Other Domestic Sources	External Financing	Govt. Appropriation	Other Domestic Sources	External Financing	Govt. Appropriation	Other Domestic Sources	External Financing	Govt. Appropriation	Other Domestic Sources	External Financing
Rice Zones 1/	280.0			560.0			825.0			1100.0			2785.0		
Rubber Development Institute 2/					310.0	100		160.0	200		180.0	340		650.0	640.0
High Yield Oil Palm															
Advisory Service		10.0			22.0			30.0			40.0			102.0	
IBRD-Maryland Co. Project	10.0			31.0		125.6	103.0		412.0	122.0		488.0	266.0		1025.0
IBRD-Western Project 2/				10.0			30.0		125.4	100.0		400.0	140.0		525.0
Coffee		100.0			15.0			13.0			17.0			145.0	
High Yield Coconut 2/				10.0											
Forestry				130.0			140.0			150.0			420.0		
Animal Husbandry 2/				175.0			225.0			275.0			675.0		
Fruit and Vegetables 2/					150.0			125.0			100.0			375.0	
Agricultural Credit Corp. 2/				100.0		100.0	100.0		250.0	250.0		250.0	450.0		600.0
Marketing 2/					50.0			100.0	200.0		100.0	200.0		250.0	300.0
Agricultural Research				175.0			190.0			200.0			565.0		
Cooperatives 2/				35.0			50.0			75.0			160.0		
Land Use Survey 2/				5.0		25.0	50.0		50.0	50.0		50.0	105.0		125.0
SUB-TOTAL	290.0 4/	110.0		1231.0	547.0	350.6	1713.0	428.0	1237.0	2322.0	430.0	1728.0	5556.0	1522.0	3215.0
OTHER DEPARTMENTAL ACTIVITIES 3/	732.0			500.0			425.0			350.0			2007.0		
GRAND TOTAL	1022.0	110.0		1731.0	547.0	350.6	2138.0	428.0	1237.0	2672.0	430.0	1728.0	7563.0	1522.0	3215.0

NOTES: 1/ Based upon two zones a year. 2/ Contingent provision based on preliminary estimates included in Policy and Planning Committee Reports for Agriculture and Forestry, also see Major Program detail on Pages 5 to 19. 3/ Non-Development Activities of the Department will be reemphasized with their respective personnel and support used to further higher priority development programs. 4/ In 1967 only rice and oil palm are official development programs.

Chapter 6

ROAD, AIRPORTS, SEAPORTS, AND RAILROADS

Liberia has never before had a systematic plan for transport development. The development of a transport system geared to the needs of a modern economy will take many years and extend over several plan periods. For this plan period, efforts will be directed to: rehabilitation of existing transport facilities which have been inadequately maintained; setting up of the necessary institutional framework; and within the limited resources available, the creation of additional capacity to the extent justified by economic criteria and policy considerations.

This chapter deals with roads, airports, seaports, and railroads. In additoon, special treatment is given to problems related to the institutional framework.

ROADS

1. General Objectives

During the plan period, it is intended to achieve the following general objectives.

a) Complete road projects now under construction.

b) Firm up a long-term program for a road network in Liberia and construct the first portion of this program.

c) Extend the network of rural roads by continuous construction and rehabilitation of such roads.

d) Continue the program of improving urban roads.

e) Coordinate private and local road-building activities, where these provide additions to the existing public road network.

II. Program

1. Prerequirements for Road Planning

In order to improve the basis for road planning it is planned:

- to make an inventory and map of all existing road facilities;
- to obtain statistical information on road traffic required for future road planning.

The following action will be taken to meet these goals:

The DPW will establish an inventory of road facilities by:

a) Collection of available information on existing and planned roads. The main sources of information would be the Department of Public Works, Department of Planning and Economic Affairs, and Concessions.

b) Drawing a map (Scale 1:125,000), indicating the location of the existing roads, indicating paved roads, all-weather laterite roads, dry weather roads. The map should indicate which roads are government-built and maintained, and which are privately-built and maintained.

c) The Department of Public Works in cooperation with the Department of Planning and Economic Affairs will establish traffic counts on major roads with special emphasis on those which are considered for inclusion in road development program.

The Department of Planning and Economic Affairs in cooperation with DPW will carry out studies of transport costs on various types of roads in Liberia and of the composition of road traffic.

A Road Planning Group will be set up to coordinate road planning studies, and make recommendations to the National Planning Council on

road projects to be constructed and other matters related to road planning.

The group will consist of members of the Office of Planning of the Department of Public Works and a representative from the Department of Planning and Economic Affairs and be chaired by the Secretary of Public Works. Whenever required, the group will call upon representatives of other departments, concessions, etc., to participate in the meeting. Among the first issues to be considered by this group will be:

a) inventory and map of road planning

b) traffic data collection

c) establishment of priorities for rural and primary roads.

2. Long-term Plan for Primary Road Network

The attached map showing existing primary roads, indicates projects under construction and planned projects for which engineering is well advanced. Also indicated on the map are roads considered for inclusion in the long-term road plan for a network of primary roads, one along the coast from the Sierra Leone border to Harper and one through the interior from the Sierra Leone border - Voinjama to Maryland county. These two trunk roads are at present connected only by the Monrovia-Gbarnga highway. Under the long-term plan, it is intended to link:

a) Voinjama area with Montserrado County directly.

b) Tappita area with the coastal area, either by two roads as suggested on the map or by one road between Tappita and the coastal highway.

c) Tchien and Greenville (road under construction).

During the plan period, the Road Planning Group will be responsible for reviewing and up-dating the long-term road plan. For proposed new construction, engineering and economic feasibility studies will be prepared as a basis for choice between possible alternatives. The work load involved in carrying out these studies will be distributed as follows:

a) Road Planning in Southeast Liberia

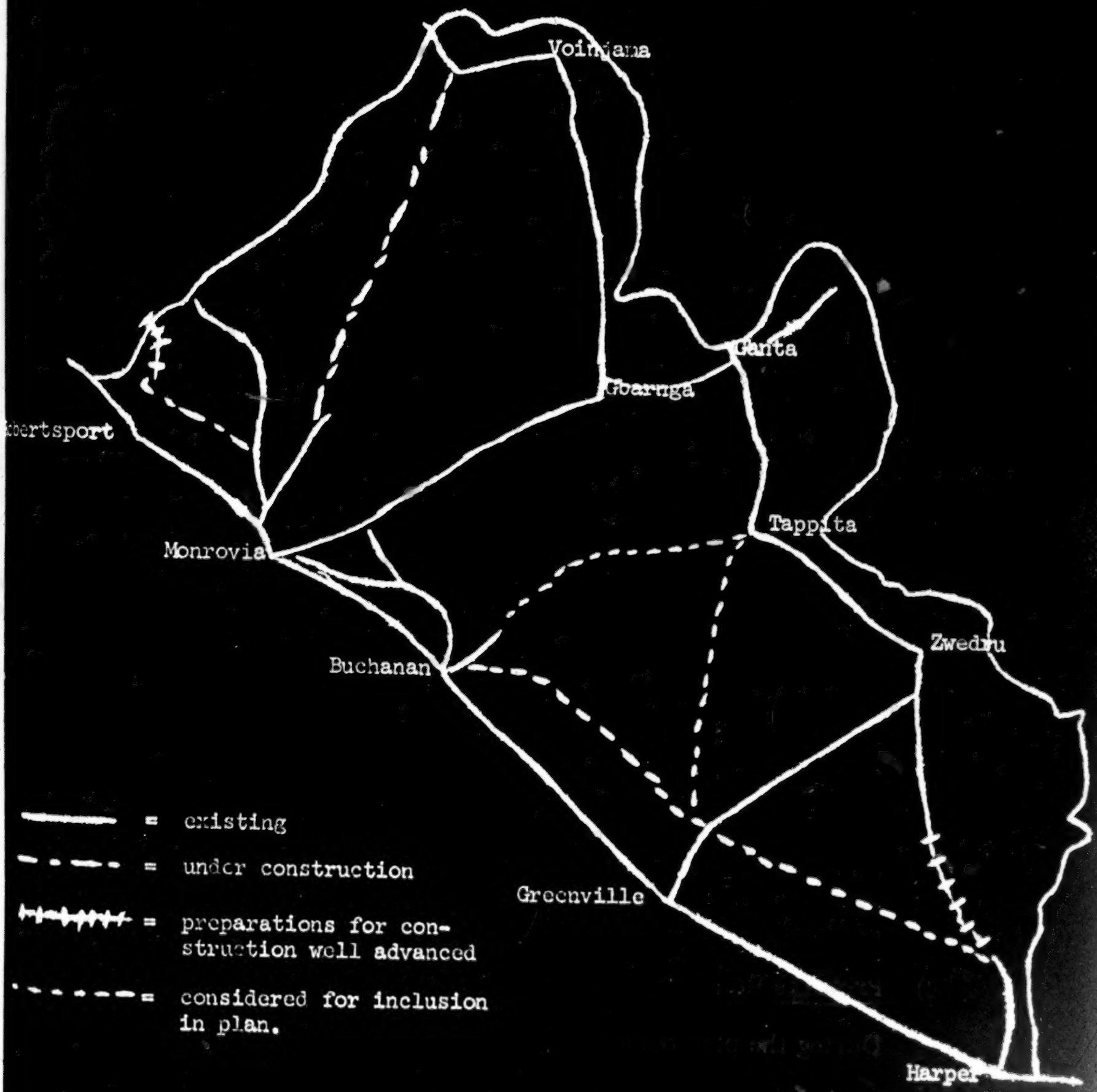
A consultant is carrying out an elaborate study of transport problems in Southeast Liberia which will result in a program of road (and port) development for the region.

b) Engineering

Considerable engineering work is required to implement the road plan in other areas. The Department of Public Works will carry out the engineering surveys for projects considered for inclusion in the Plan:

1. Monrovia-Kakata (Rehabilitation)
2. Ganta-Tappita (Improvement to primary standards)
3. Monrovia-Bomi Hills (Improvement to primary standards and paving)
4. Gbarnga-Sanniquellie (Improvement to primary standards and paving)
5. Gbarnga-Belafania (Improvement to primary standards
6. Totota-Gbarnga (Paving)
7. Kakata-Totota (Rehabilitation)
8. Kolahun-Montserrado County (New construction)

PRIMARY ROAD SYSTEM



c) Economic Feasibility Studies

Economic feasibility studies shall be carried out by the Department of Planning and Economic Affairs which will collect the data required and provide the Road Planning Group with materials necessary to make sound decision on priorities.

3. Highway Construction During Plan Period

A. Projects Under Construction

During the first years of the plan period, the main activity in major road construction will be the completion of projects already under way:

a)	Kle-Pujehun	60% completed, financed by IBRD
b)	Monrovia-Robertsfield	30% completed, financed by IBRD
c)	Greenville-Juarzon	95% completed, financed by Germany
d)	Juarzon-Tchien	15% completed, financed by Germany

B. Possible IBRD Projects

Discussions are underway with the IBRD for the possible financing of the following projects:

a) Construction of a new road link from Tartuke to Karloke - 38 miles - estimated cost including engineering - $2.5 million.

b) Engineering for the 28 mile extension of the Kle-Pujehun road to the Sierra Leone border - estimated coat including engineering is about $2.5 million.

c) Projects Resulting from the Southeast Survey

During the plan period, high priority will be given to the construction of roads aimed at opening up the Southeastern part of the country.

Until the new Southeast area study becomes available, the following suggest the types of projects which may emerge from the Survey, and the magnitude of the road construction to be undertaken in the area:

a) road connection between Greenville and Camp King on Harper-Tchien-road - 100 miles, estimated cost - $5-6 million;

b) road connection between Tappita and Coastal highway estimated cost $6-7.5 million;

c) road connection between Tappita and Coastal highway 100-120 miles - estimated cost $5-6.5 million.

Road surveys, negotiations for foreign loans, building, etc., for these projects arising from the southeast survey will fall in 1967-68. Construction of some of them could be initiated starting towards the end of 1968, with some $2-2.5 million possibly to be spent in the Plan Period.

D. Upgrading of Existing Roads

Large stretches of primary roads falling in various categories are in need of improvement. These categories are:

a) Roads, originally constructed to secondary standards:

	Miles
Suakoko-Gbarnga	11
Gbarnga-Ganta-Sanniquellie	70
Ganta-Tappita	62
Monrovia-Bomi Hills	48
Gbarnga-St. Paul River	28
	219

b) Roads which, although constructed to standards, have deteriorated to a point where major rehabilitation is needed, e.g., Monrovia-Kakata.

c) Roads on which present and future traffic may justify paving, e.g.

	Miles
Totota-Gbarnga	42
Monrovia-Bomi Hills	48
Gbarnga-Sanniquellie	70
	160

At an average cost of $30,000 per mile, the total cost of such an improvement program would be $10-12 million. Before foreign financial assistance could be obtained, it will be necessary to collect information on engineering, traffic counts, transport costs, and maintenance costs. If Government counterpart contribution of $0.5-1 million could be budgeted a program of $2-4 million might be contemplated. Such a program would be a valuable first step towards improving the parts of the primary road network which are most urgently in need of upgrading.

4. Rural Roads

A. Goals

The program goals for the rural road program will be:

a) The rehabilitation or new construction of approximately 60 miles of rural roads per year to open up areas with sufficient population density, agricultural potential, etc., to justify such construction. This work should be done under DPW Force Account within the framework of the contemplated USAID Rural Road loan package.

b) Additional 60-80 miles of rural roads should be built by contractors under the same loan agreement.

c) Maintenance of rural roads should be improved to avoid deterioration of new and existing roads.

d) Local self-help schemes for the construction of rural roads shall be given assistance by the DPW in form of engineering assistance, equipment, etc., whenever possible.

B. Program

a) New Construction: The construction of rural roads will be among the major activities to be undertaken directly by DPW during the Plan Period. The construction teams of the Department are constructing two rural roads included in an earlier USAID assistance program, i.e., Gbarta-a-Founetoleh (18 miles), and Saglepie-Khanpley (partly rehabilitation) (48 miles). In addition, construction is under way on a road from Robertsport to Medina (26 miles) on the new Kle-Pu'ehun Road, financed partly by DPW and partly by U.S. commodity loan funds. Government's contribution to these projects is estimated at $400,000 for 1967. When they are completed, the Department will undertake for the rest of the plan period construction of 185 miles of road, financed in part by USAID loan. These include:

Tappita-Yilla (Palala)
Todee-Mt. Coffee
Tchien-Ziatown
Pleebo-Barclayville
Khanpley-Blemieplay
Bopolu-Belle Yella
Kolahun-Kailahun
Mano-Mines Bridge over Lofa River-Sengeh

The total cost per mile of rural road averages $10-12,000 of which $3-4,000 represents DPW's direct expenditures.

b) Rehabilitation: A substantial mileage of roadway which was at some time used by motor vehicles has been allowed to fall into disrepair because of insufficient funds and equipment for maintenance. As part of the rural road program

DPW will aim at rehabilitating some of these roads. Standards will be kept to a minimum: single lane lateriate road; culverts as far as possible of a permanent type; bridges of the most resistant timber available in the region, to keep maintenance to a minimum. Where traffic expectations justify this, standards will be increased above this minimum level. During the first construction seasons of the plan period, rehabilitation will be undertaken under the USAID loan program mentioned above.

c) Private Road Construction: As in the past, private road construction will continue to add to the road net-work of the country. Logging and mining companies and plantations construct roads for their own activities, some of which serve as rural roads for the general public.

d) Self-help Road Construction: Wherever self-help road construction is planned by local authorities, the DPW will, as far as possible, assist in these efforts by engineering assistance, equipment, operators and materials. The impact which this type of construction can make is difficult to foresee; however, out of this self-help effort, some 25-50 miles of feeder roads may be added to the country's road network each year.

5. Streets

During the Plan Period, the following major street construction is contemplated:

Monrovia Freeway	2-lane pavement - 8 miles Anticipated cost: $250,000.
This project will be considered as part of the highway improvement program mentioned above.	
Capitol By-Pass	1 mile Estimated cost: $600,000
Mesurado River - St. Paul River (rehabilitation)	5.5 miles Estimated cost: $500.000.

Street improvement and paving in Monrovia will be continued by the DPW Maintenance Division at a cost of approximately $100,000 per year.

In addition, paving of Harper streets will be continued in 1967 at a cost of $200,000. Expenditures of this order of magnitude will be used each year for program of street paving in other cities.

6. Road Maintenance

It is planned that with foreign technical assistance, a firm basis for budgeting of maintenance operations of the DPW will be established including the assembly of complete cost data of maintenance operations. This will furnish reliable information about the needs for manpower, equipment, material, fuel, etc., required for effective maintenance of the road system and will lead to realistic budgeting of funds.

7. Maintenance Training Project

Foreign technical and financial assistance will be sought for an on-the-job training program in road maintenance to increase and ungrade the available manpower pool of trained personnel. In addition, up-country maintenance shop facilities are planned under the USAID Rural Road Loan. Negotiations are underway for the establishment of a maintenance depot at Buchanan with financial assistance from the German Government. The purpose of this project is to train Liberians at all levels in efficient maintenance routine, including administration, reporting, inspection and equipment operations.

It is estimated that the DPW has $1.5 million of road maintenance equipment. This equipment requires spare parts of at least $175,000 per year and fuel of approximately $100-125,000. During the plan period it is assumed that an annual replacement budget (with foreign assistance) of approximately $250-300,000 will be required.

III. Summary of Expenditures

Table 6.1 gives the summary of estimated expenditures on roads during the plan period.

AIRPORTS

I. General Objectuves

a) develop Liberia's airports to standards consistent with the type of density of traffic;

b) ensure proper management and operation of these airfields;

c) continue the training of Liberians in the field of civil aviation to further promote Liberianization of these activities.

II. Programs

In order to achieve these objectives the following programs are planned:

1. Roberts International Airport (RIA)

A. Goals:

a) to develop the RIA into a modern international airport by improving it to meet the standards established by the International Civil Aviation Organization thus enabling the airport to attract international air carriers and to be capable of accepting the largest aircraft in commercial use at present or in the foreseeable furuew;

b) to ensure that the airport operates at the highest level of technical and economic efficiency.

B. Projects

In order to meet these goals the following projects will be undertaken:

a) Major Construction Program: The long term development plan for RIA provides for a $7.5 million construction program. During the plan period the first phase of this program will be carried out. It consists of the following:

	Estimated Cost ($ 000)
estension of runway, paving of taxiway, construction of apron	1,056.3
Navigational aids and other items related to the safety of the airport	1,281.2
utilities, roads, housing etc.	658.2
design costs	374.3
Total	3,370.0

b) Capital Improvement Program: During the last few years substantial improvements have been carried out under the regular capital inprovement program of the airfield. This program has included renovation and construction of housing, purchase of communications equipment, vehicles, paving and construction of roads, water system and other activities. During the plan period it is intended to continue this capital improvement program at an average rate of $100,000 per year of which 70% is to be financed by the general government budget, and the remainder by airport profits and borrowing.

2. Other Airfields

The programs outlined below for Spriggs Payne and other airfields describe airfield development desirable to be carried out during the plan period. It is the intention of the government to introduce a system whereby Civil Aviation revenue is collected by the agencies responsible for operation and development for airfields and set aside for an airfield development program. The immediate cost of the program to the government will be limited to the loss of airfield revenues (corrently $25-35,000 per year).

Through improved collection of revenues and possible foreign aid to supplement these funds it should be possible to carry out a modest first step of the outlined program of some $100-150,000 per year, say $375,000 in the period 1968-70.

A. James Spriggs Payne Airfield

Plan Goals are as follows:

a) To retain Spriggs Payne Airfield for use of domestic and inter-regional air traffic and develop it in accordance with the recommendations of the ICAO Aerodrome Engineer's report to ICAO Standards for DC-3 aircraft and comparable equipment.

b) To protect the airfield and approaches from building encroachment.

c) To develop the associated ground services for the safe operation and efficient management of the airfield.

d) To provide management, consistent with the airfield's status responsible as Government Agent for the collection of all landing fees, rentals and other airfield income and for the provision of essential services in Air Traffic Control, runway maintenance, communications equipment and maintenance thereof and implementation of a crash rescue and fire service.

In order to achieve these goals, the following will be initiated during the plan period:

a) Investment

To meet the minimum safety requirements for scheduled air traffic of DC-3 aircraft and comparable equipment in both Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) meteorological conditions it is necessary to improve the present strip and runway at an estimated cost of $680,000. Also to provide the essential ground services it is necessary to install air traffic control equipment, radio masts and aerials, standby power plant, tools, radio test equipment, crash, rescue, fire facilities and extinguishing media, radio circuit to Roberts International Airport, a teleprinter unit, a new control tower and building for th standby power plant at an additional cost of $70,000.

b) Management

Airport management, maintenance and operation of Spriggs Payne is well below standards and is not consistent with the status of the airfield. Substantial revenues are not collected and are thus being lost to Government. To remedy this situation, negotiations are under way to extend the contract of the Government Agent, RIA, to include the management, operation and maintenance of Spriggs Payne aerodrome.

B. Harper

Plan Goals are as follows:

a) To provide the airfield at Harper City with a runway which meets the operational and safety requirements of aircraft operated by the Liberian National Airlines.

b) To install and house the minimum amount of essential ground services and communications equipment necessary for the protection of life and property.

c) To protect the airfield site and approaches from building encroachment.

The Harper runway which is too short (3,400 ft.) for regular DC-3 operation and cannot be extended to the desired specifications and length will be re-oriented by approximately 15 degrees on the same site. The estimated cost of building the new strip and runway, and providing the necessary ground services is $144,000. Estimated annual recurrent expenditure is $9,500.

C. Sinoe and River Cess Airfields

Plan Goals are:

a) To protect the sites and approaches from building encroachment.

b) To retain, improve, and maintain the runways and strips at both airfields to a standard which meets the operational and safety requirements of aircraft operated by the Liberian National Airlines.

c) To install and house the minimum amount of essential ground services and communication equipment necessary for the protection of life and property.

To achieve these goals it is planned:

a) Sinoe

To level a ridge at the end of the runway, to install communications equipment and purchase and operate fire rescue facilities. Estimated cost: $25,000, with recurrent annual expenditures of $10,220.

b) River Cess

To extent, raise and widen runway for DC-3 aircraft, to install communication and fire rescue facilities would cost an estimated $100,000 with annual recurring costs of $9,500. Before a commitment is made for this project careful consideration should be given to servicing River Cess with smaller planes.

D. Weasua

Plan goals for this airstrip are as follows:

a) To assume control over some 450 aircraft landing and taking off each month.

b) To provide simple airstrip maintenance. To achieve this it is planned to establish and operate airstrip radio communications and provide for hand maintenance of the airstrip. Estimated cost: $4,000 with annual recurrent costs of $3,000.

E. Cape Mount, Voinjama, Sanniquellie, Tchien, Belle Yella

The plan goal is to provide for simple maintenance, bush clearance and minor airstrip improvements for these airstrips. Estimated cost averages $3,000 per strip.

F. Protection of Airfield Land

It is necessary to delineate, mark and protect airfield property by having it declared "Restricted Area". The Department of Commerce and Industry is responsible for this action. The cost of marking the airfields is estimated to be approximately $1,000 for ten (10) airfields.

G. Training

For the operation of the existing and new facilities there will be an increasing demand for personnel with specialized training. This training will be the responsibility of the agencies concerned.

During the plan period the training goals will be:

a) To continue the existing training program for Liberian personnel at Roberts International Airport and in the Civil Aviation Division of the Department of Commerce and Industry.

b) To develop and implement detailed programs for the training of Liberians to work in the following agencies:

National Port Authority
Bureau of Transport
Monrovia Free Port Management
Other Port Managements

These training goals will be implemented as follows:

a) The major training program for Liberians in the specialized fields of aviation is carried by RIA's operating budget. The annual cost is estimated as follows:

RIA contribution to USAID Training Program $14,000 1/

1/ The above program coordinates the training requirements and fits into the USAID bilateral Technical Assistance for which the United States provides a grant of approximately $80,000.00 per annum for training in the following fields:

Adult Education, Correspondance Courses, Pre-training for Overseas Scholarship Candidates	15,000
Fire/Rescue Training Program	9,000
Customer Service Training	3,000
Communication Training	3,500
Catering Training	4,000
	$48,500

Air Traffic Control
Communication Operators
Flight Operation Officer
Meteorologists
Airport Fire Officers

Aircraft Mechanics
Radio Mechanics - Navigational Aid Specialists

Airport Managers
Civil Aviation Administration

The total cost of this program over the four-year period is $514,000.00 of which $320,000.00 represents foreign aid.

b) Division of Civil Aviation, Spriggs Payne and other Aerodromes.

During the plan period an amount of $28,000.00 is required to provide employment of trainees to attend local courses and on-the-job instruction prior to proceeding on overseas training. Sufficient funds, for overseas basic and specialized training, are available during the plan period through USAID and the United Nations Expanded Program of Technical Assistance.

c) Other Agencies

In order to develop realistic plans for training of Liberians in these fields the following agencies will be requested to prepare training programs for the Government's consideration:

Department of Commerce and Industry

Bureau of Transport

Board of Directors of National Port Authority:

National Port Authority

Monrovia Free Port

Greenville and other Port Managements.

Each of these programs will cover the following points:

- total staff by category -- expected future development
- expatriate staff by category
- types of training suggested (formal, on-the-job)

  recruitment methods and problems
- number of trainees, taking into account likely drop-out-rates
- cost of program, taking into account possible sources of assistance, e.g. U.N. training courses, scholarship offers, etc.
- time table for replacement of expatriates.

In so far as existing program do not cover these points the appropriate agencies should be asked for supplementary information.

III. Summary of Expenditures.

Table 6.2 gives a summary of planned investment and recurrent expenditures during the plan period.

SEAPORTS

I. General Objectives:

a) to develop port capacity consistent with the foreseen economic development of the country, including in particular the exploitation of timber resources;

b) to continue the training of Liberians in port operation and management to promote Liberianization of these activities.

To achieve these two objectives the following programs will be implemented by the end of the plan period. Table 6.3 summarizes the planned investment expenditures on these programs.

1. Free Port of Monrovia

A. Plan Targets:

- to effect appropriate expansion of capacity and make the port more efficient, the following targets are established:

a) Move the berths for small coastal vessels away from the present general cargo wharf.

b) Dredge and widen the turning basins and channels to receive larger ore carrier vessels and also facilitate ship movements within the port.

c) Provide public warehouse facilitates.

d) Improve interim passenger facilities.

e) Negotiate the transfer of the responsibility for the maintenance of the United Nations Drive and Mesurrado Bridge to the Department of Public Works.

f) Prepare a master plan for Port development within the first year of the plan period.

g) Study the need for acquisition of land for future development and expansion of the Port.

B. Projects:

In order to achieve these targets, the following projects are proposed:

a) the interim passenger terminal facilities will be improved in 1967 by rearranging the existing space in Warehouse No.1 into a more suitable passenger terminal with adequate facilities. Estimated cost: $30,000.

b) In 1967, responsibility for reconstruction and maintenance of the United Nations Drive will be negotiated. In return for a take-over of future maintenance responsibility by D.P.W., the Free Port will make a contribution towards the reconstruction of this road.

c) The Management of the Free Port will enter into immediate negotiations with private firms for the construction and operation of public warehousing. Estimated cost: $130,000.

d) Dredging will be carried out in 1967-1968 to the depth required by the iron ore companies after agreement with the companies concerning financing. At the same time the channel to the fishing pier will be deepened to 23 feet and sidened to 200 feet and the turning basin increased to a 500 foot diameter. Dredging feet towards the south breakwater will also be carried out. Estimated cost: $3,000,000.

e) The present inadequate roads and drainage within the port area will be improved during the plan period to permit handling of anticipated traffic. Estimated cost: $200,000.

f) In 1968-1970, the existing general cargo wharf of 2,000 feet will be extended by 150 feet towards the south breakwater. This will make it possible to move the feeder craft away from their present berths and assure the availability of additional berthing space for the larger ocean-going ships.

g) The Liberian Development Corporation in cooperation with the Port Management will study the feasibility of attracting business, especially manufacturing, to the Free Port. On the basis of this study and a review of present land use practices in the Port area recommendations will be made regarding the need for providing more land for expansion of the port area.

h) The erosion of the shoreline north of the Free Port will be kept under close observation and, if necessary, an erosion study and anti-erosion measures will be carried out. Estimated cost: $10,000.

2. Port of Buchanan

A. Plan Targets:

a) complete arrangements for the management of the "Commercial Quay" and port operations;

b) delineate port property and prepare a master plan for port development;

c) make the additional investments in warehouse capacity, handling equipment, etc., required to handle traffic foreseen in the port.

B. Activity:

Complete negotiations underway with LAMCO J.V. for management and operation of the port. It will be the task of the port management to implement the plan goals and assist in obtaining foreign financing for the investment required for the port estimated at $450,000. In additón to this, a customs office and warehouse is being constructed at a cost of $64,000.

3. Ports of Greenville and Harper

A. Plan Target:

The development of the capacities of these ports for exporting timber as the main commodity, subject to the findings of the economic engineering survey of transport requirements in southeast Liberia is now underway.

B. Program:

a) In 1967 a detailed survey of transport problems in southeastern region, financed by USAID, will result in a development program for the ports in this region.

b) Based on this development program, construction will be carried out in the two ports. For planning purposes the total cost is estimated at $8-10 million, of which some $5 million will be expended during the plan period.

RAILROADS

Railroads in Liberia are owned and operated by the mining companies for their own purposes. During the plan period Government activity in this field will be related to the use of railroads for commercial traffic.

The Government will:

a) continue to use its good offices in an attempt to bring about a successful outcome of negotiations now under way for use of the LAMCO Railroad for commercial traffic;

b) review the situation in this field from time to time in order to ascertain whether opportunities exist for increasing the use of existing railways for commercial traffic. Until such time as this function can be taken over by the proposed Bureau of Transport, mentioned below, it will be carried out by the Department of Planning and Economic Affairs.

ADMINISTRATIVE STRUCTURE

I. General Sector Objectives

a) To set up a National Port Authority with responsibility for seaports and airports.

b) To centralize general responsibility for transport matters in a Bureau of Transport.

II. Program

In order to achieve these objectives it will be necessary to effect the following institutional changes:

1. The National Port Authority

Legislation to set up the Authority has been drafted. As soon as this legislation is enacted, a Board of Directors of the National Port Authority will be appointed by Government. At the first stage the Authority will only take over responsibility for seaports. During the plan period consideration will be given to the objective that also airports should be included under the National Port Authority.

2. Bureau of Transport

a) A Bureau of Transport will be set up early in the plan period within the Department of Commerce and Industry;

b) The legislation providing for the transfer of the Bureau of Maritime Affairs to the Department of Commerce and Industry will be activated;

c) The Department of Commerce and Industry, in cooperation with other interested agencies, will define the scope of responsibilities and the functions of the Bureau of Transport.

Table 8.1

Estimated Expenditures on Roads by Year: 1967-1970

($000)

PROJECT	1967		1968		1969		1970		1967 - 1970		REMARKS
	Gov't	Total	Gov't	Total	Gov't	Total	Gov't	Total	Gov't	Total	
IBRD road program	543	1,550	-	-	-	-	-	-	543	1,550	Financed 65% by IBRD
Greenville-Tchien	0	2,500	0	1,500	-	-	-	-	0	4,000	Financed 100% by Germany
Tartuke-Karloke	50	50	320	1,000	350	1,000	155	450	875	2,500	Negotiations underway with IBRD for financing
Pujehun-Sierra Leone	-	-	100	390	200	570	350	1,000	650	1,960	Negotiations underway with IBRD financing
Southeast Program:											
Survey	-	700	-	-	-	-	-	-	-	700	Survey financed 100% by USAID: 90% USAID financing assumed for construction.
Construction	-	-	-	-	100	1,000	125	1,250	255	2,250	
Road Impvement	111 x/	111	150	600	200	800	250	1,000	711	2,511	75% foreign financing to be sought for 1968-1970
Rural Roads	31 x/	400	150	1,000	200	1,000	250	1,000	331	3,400	Assuming approval of proposed USAID program
Street Improvement	255	655	350	750	350	550	300	300	1,255	2,255	100% German financing of Capitol by-pass ($600,000) Free Port contribution of $400,000 to Mesurado - St. Paul road assumed.
Maintenance Support	269	269	225	425	225	425	225	425	944	1,544	80% foreign financing of replacement program 1968-1970 to be sought
Total	1,259	6,235	1,295	5,665	1,625	5,345	1,655	5,425	5,835	22,670	

x contribution from development budget 1967 only.

Table 6.2

Capital Expenditure on Airfields by Year

($000)

A. AIRPORTS	1967		1968		1969		1970		1967-1970	
	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget
1. Roberts Int'l Airport										
a) Major construction	–	–	1,500	150	1,900	190	–	–	3,400	340
b) Capital Improvement	100	60	100	70	100	70	100	70	400	270
2. Spriggs Payne										
3. Cape Palmas										
4. a) Sinoe	–	–	100	30	125	30	150	30	375	90
5. b) River Cess										
5. Sanniquellie										
6. Weasua										
7. Marking airfield land	1	1	–	–	–	–	–	–	1	1
TOTAL AIRPORTS:-	101	61	1,700	250	2,125	290	250	100	4,176	701
Training										
1. R. I. A.										
2. Division of Civil Aviation	134	–	135	–	136	–	137	–	542	–
		6		6		8		8		28
3. Other Programs		?		?		?		?		?

Table 6.3

Capital Expenditures on Ports by Year

($000)

PORTS	1967		1968		1969		1970		1967 - 1970	
	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget	Total	Gov't budget
1. Monrovia	1,710	-	1,550	-	155	-	155	-	3,570	-
2. Buchanan	215	-	100	-	100	-	100	-	515	-
3. Greenville/ Harper	-	-	-	-	2,000	200	3,000	300	5,000	500
TOTAL PORTS	1,925	-	1,650	-	2,255	200	3,255	300	9,085	500

Chapter 7

COMMUNICATIONS

In the plan period special emphasis will be on the improvement of communication services within the existing system and on maintaining existing facilities. In addition certain selected investments are proposed to supplement existing facilities and to increase the efficiency of service.

POSTAL SERVICE

I. The General Objectives:

a) to improve the postal service throughout the country with special emphasis on servicing the new counties in support of the Government's unification program;

b) to increase the productivity of the postal administration by increasing efficiency and developing a more appropriate system of financial control;

c) to improve the financial position of the postal service by giving priority to revenue-generating services;

d) to meet outstanding bills to foreign postal administrations.

II. Special Goals:

a) to maintain regular and frequent mail service to the post offices and postal agencies outside Monrovia. It is the aim to provide mail service at least once a week to all offices and agencies in the country;

b) to complete the program of opening post offices in all county seats. An attempt will be made to have suitable space made available by the local authorities for the initial setting up of post [illegible] in all county seats. When funds become available, functional post office buildings will be constructed;

c) to improve the postal service in Monrovia by opening a branch office and constructing in stages, as funds become available, additional space for the Monrovia Post Office and the Postal Administration;

d) to provide a mobile post office to serve outlying postal districts around Monrovia;

e) to improve the financial system of the Postal Service so that postal revenues can be used to expand the services in response to demand.

In order to meet plan goals the following activities are proposed:

a) Mobile Post Office

To serve the need of many communities within an area bounded by Klay on the Bomi Hill Road, Totota on the road to the north, and Harrisburg and Bopolu on subsidiary roads, a mobile post office will be purchased and operated. It will be scheduled to stop at townships along a pre-determined route to provide a delivery and counter service.

b) Equipment for New Post Office

With the cooperation of County Superintendents new post offices are being opened in each of the new county seats. Postal equipment for these offices will be provided by the Department.

c) Construction of Standard Post Offices

A compact, functional post office building has been designed with external dimensions 25 ft. x 25 ft. which can be erected and fully equipped for about $10,000. It is planned to construct one at each of the following County seats: Sanniquellie, Voinjama and Zwedru.

d) Furnishing of the Gbarnga Post Office

The Gbarnga post office building is under construction. When this self-help project is completed the Department will provide the furnishing and necessary equipment for the office.

e) Post Office Boxes

Modern post office boxes will be installed in those post offices outside Monrovia where there is a demand for them. This installation will provide improved service and be self-amortizing.

f) Post Offices - Greenville and Harper

At Greenville the local authorities propose to construct a post office on a new site in the center of the town. The Department will provide equipment to the post office when completed.

At Harper a modest renovation and extension of the post office is planned.

g) Branch Office Camp Johnson Road, Monrovia

To serve a very busy sector of Monrovia, located more than a mile from the central post office, it is planned to establish a branch office in this area.

h) Monrovia Post Office Complex

The small annex completed early in 1965 has proved how efficiency can be raised by using properly designed facilities. It is proposed that a postal complex be provided capable of housing the Monrovia postal services in their entirety on the first three floors, with the General Post Office Headquarters on the top floor.

To give adequate service for the next fifteen years, the following space will be required:

GROUND FLOOR -	Public Office with all counter facilities, Outward Sorting Section	5,000 sq.ft.
FIRST FLOOR -	Parcel Storage and Customs Assessment	5,000 sq.ft.
SECOND FLOOR 1/	Postmaster's Office, Records and Stores, Bag Control, Return Letter Office, Welfare facilities	7,700 sq.ft.
THIRD FLOOR 1/	Postmaster General's Suite, Conference Room, Administrative Section, Strong Room	7,700 sq.ft.
	Total space requirements	25,400 sq.ft.

1/ This represents building (7,700 sq. ft. on each floor) over the existing postal annex.

The work will be done in the following stages:

> Erect second and third floors above existing annex. Demolish the old postal building and complete the postal complex. It is estimated that this will take three years to complete.

Foreign Mail Accounts

A major financial problem of the postal service is outstanding balances on the foreign mail account. Provision should be made to meet these outstanding balances inorder to insure continuing service.

Financial Flexibility

All postal service revenue is paid to the Treasury and expenditures are provided for in the general budget. This poses problems for a service whose operation in many respects resembles that of a business concern. To meet this difficulty, it is proposed to introduce a system which will allow the postal administration to use its own revenues directly for certain specified purposes. Such a system which is employed successfully in other administrations, would result in improved service and increased revenues.

The advantages of the proposed financial flexibility include: ready availability of funds to meet payment of bills to foreign administrations, etc., for carrying of mails; ready availability of funds essential to the maintenance of existing services and the increasing of revenue through expanded services; suitable accounting procedures to reflect the financial position of the services.

The Department would gain a degree of autonomy and financial flexibility but it would remain fully accountable to the appropriate agencies of Government, which would continue to exercise general control.

The cost of the proposed program is given in Table 7.1.

TELECOMMUNICATIONS

I. General Objectives:

a) To ensure efficient operation and maintenance of the existing telecommunications system.

b) To reduce the operating deficit of the system by all appropriate measures including investments carefully selected on the basis of detailed cost/benefit analyses.

c) To speed the training of Liberians in operation, maintenance and management of the system.

d) To consolidate duplicating existing systems into a single telecommunication service.

II. Plan Goals:

a) To set up in the first year of the plan period, under the chairmanship of the Postmaster General, a specialized agency of Government to be known as the Telecommunications Authority, to be responsible for the management and operation of public telecommunications services.

b) To set up within the Department of Post and Telecommunications a Bureau of Technical Affairs to regulate, inspect and control all radio networks in the country; and which will also represent the Government of Liberia vis-a-vis international agencies.

c) To increase efficiency by negotiating a contract with an experienced firm to direct the management and operations of public telecommunications and setting up a training program and an overall long-term development plan for the telecommunications system.

To achieve these goals, the following activities are proposed:

a) Enacting in the first year of the Plan, Legislation establishing the Telecommunications Authority with responsibility for Telecommunications Services.

b) Negotiating a management contract with an experienced firm. The management will then be committed to carrying out all the other general and specific goals stated in the plan for telecommunications. (An annex giving details of the proposal to set up a Telecommunications Authority is attached).

c) Establishing a Bureau of Technical Affairs within the Department of Post and Telecommunications.

Training

The new Authority will be required to take over the existing staff for a probation period while assessing their qualifications and capabilities. It may be assumed that no additional manpower requirements will result from this reassessment of the needs of the system, but the management of the Authority will be expected to increase the level of training and education of the staff by (i) temporarily employing expatriate personnel where trained Liberian staff is not available, (ii) developing a realistic long-term training program which will result in Liberianization of the staff.

Budgetary Implications

In estimating the budgetary implication of the telecommunications programs a large element of uncertainty cannot be avoided. The table below gives a forecast of the subsidy required to cover the operating deficit of the Telecommunications Authority during the plan period. This estimate is based on the assumption that from the time the Authority is established, provisions will be made in the general budget for the payment of Government bills.

Table 7.1

COST OF THE POSTAL PROGRAM: 1967

1967	CAPITAL COST	RECURRENT COST	REMARKS
Mobile Post Office	$5,000 (Vehicle fully equipped)	$1,500 (Staff of two 10 months 500 (Maintenance) 300 (Fuel)	To provide essential postal services to about 20 small towns around Monrovia.
Equipment for Post Offices in New Counties	800 (3 safes) 150 (3 scales) 250 (sealing presses and date stamps)	-	To provide essential equipment to operate new services securely.
Nests of Post Office boxes at Buchanan, Gbarnga, Robertsfield, Habel	3,500 (336 P.O. Boxes)	(These boxes should produce minimum income of $1,500 per annum).	To satisfy public demand and improve service.
Equipment for Gbarnga Post Office	2,000	-	To ensure completion of this partially finished Post Office.
Construction of Monrovia Post Office Complex	80,000	-	Second and third floors above existing annex. $60,000 to be provided out of income from Philatelic Agent.
TOTAL FOR 1967	$91,700	$2,300	

Table 7.1 (Page 2)

COST OF PROGRAM (Cont'd): 1968

1968	CAPITAL COST	RECURRING COST	REMARKS
		$ 2,600	(Brought forward from 1967)
Erection of one Standard Post Office	$10,000 (Fully equipped)		To replace inadequate Accommodation at Voinjama.
New equipment for Greenville Post Office and contribution towards construction	5,000	-	To provide a model, larger type office to replace existing one.
Acquisition of old Monrovia Post Office and site.	Figure to be assessed by DPW	-	-
Demolition of old Monrovia Post Office building	20,000	-	
Construction Monrovia Postal Complex	200,000	-	$180,000 to be provided out of foreign loan and Philat. Ag. revenue. Ground and first floors to be built on old Monrovia Post Office Site.
TOTAL FOR 1968	$235,000	$ 2,600	

Table 7.1 (Page 3)

COST OF PROGRAM (Cont'd): 1969

1969	CAPITAL COST	RECURRING COST	REMARKS
		$ 2,600	(Brought forward from 1968)
Erection of one Standard Post Office	$10,000 (Fully equipped)	-	To replace inadequate accommodation at Sanni-quellie,
Alterations to Harper Post Office	5,000	-	To extend accommodation to cater for growth.
Completion Monrovia Po stal Complex	200,000	-	Second and third floors. $180,000 to be provided out of foreign loan and Philatelic Agent Revenue.
New Branch Office in Monrovia	2,000 (Counter equipment)	2,000 (Staff) 1,500 (Rent)	
TOTAL FOR 1969	$217,000	$6,100	

Table 7.1 (Page 4)

COST PROGRAM (Cont'd): 1970

1970	CAPITAL COST	RECURRENT COST	REMARKS
		$ 6,100	(Brought forward from 1969)
Erection of one Standard Post Office	$ 10,000 (Fully equipped)	-	To replace inadequate accommodation at Zwedru.
TOTAL FOR 1970	$ 10,000	$ 6,100	
SUMMARY			
1967	91,700	2,600	
1968	235,000	2,600	Cost of acquisition of Monrovia Post Office and Site to be determined.
1969	217,000	6,100	
1970	10,000	6,100	
TOTAL	$553,700	$17,400	Cost of acquisition of Monrovia Post Office and Site to be determined.

Table 7.2

GOVERNMENT SUBSIDY TO TELECOMMUNICATION AUTHORITY

($000)

Recipient	1967	1968	1969	1970	1967-70
Burden on General Budget	850	750	650	580	2,830
of which					
Subsidy to Telecommunication Authority	660	570	480	420	2,130
Payment for Services rendered to Government	190	180	170	160	700

No estimate is included in this table to cover expenditure related to future investment in the telecommunications system. In view of the uncertainty regarding future management of the system it is difficult to make any forecasts. It seems evident, however, that investment decisions in the future will have to be made after careful study of the cost and benefits involved. Only where such studies show that carefully selected investments can improve the financial situation of the system is it likely that the Authority will make a decision to seek financing for investment. Certain preliminary studies suggest that investment in the order of $0.5-1.0 million may be required for this purpose during the plan period but a final decision on these matters will rest with the Authority which will also be responsible for exploring the possibilities of financing such investments.

APPENDIX

PROPOSAL RECOMMENDING THE ESTABLISHMENT OF A TELECOMMUNICATIONS AUTHORITY

During recent years the Government has made very substantial investments in telecommunications. A country-wide radio multichannel system capable of carrying telephone and telegraph circuits has come into being, new telephone and telegraph circuits have been established with a number of countries, local telephone exchanges have been established at several county headquarters and the telephone system of Monrovia and Sinkor has been reactivated and extended. The telecommunications system was developed to meet the following basic objectives:-

a) To meet the public demand for improved communications as required in a rapidly developing national economy.

b) To provide easy flow of information and promote contact between all sections of the country, thereby promoting the social and political development and integration of the nation.

This major step forward has brought with it several problems, the most important of which are:-

a) There is an acute shortage of qualified Liberian personnel, and an intensive training program must be inaugurated. Because of the complexity of the telecommunications service such a program cannot be accomplished rapidly but its clear final goal must be to make the service independent of expatriate expertise.

b) Whilst Liberian personnel are being fully trained the day-to-day services must be efficiently maintained and developed, thus promoting Government's considerable investment.

c) Present personnel policies are unsuitable for producing the high degree of productivity which this commercial type service requires.

d) The austerity program makes it difficult for Government to provide the additional financing needed for present operation, maintenance and further expansion.

e) Difficulty of access to many telecommunications sites and problems of transport contribute to high operating and maintenance costs.

To find solutions to these problems, priority must be given to the establishment of an organization so planned and managed that, while keeping within the parameters of Government policies, it would provide efficient and reliable services, with continuing development. There have been instances in Liberia where certain public services, such as electricity, water and sewers, broadcasting and television, have been placed under the control of Boards. There are good reasons to think that such a type of organization operates most efficiently and economically. They adopt commercial practices and establish salary and wage structures suited to their particular needs, which has a noticeable positive effect on recruitment and performance of personnel. Since telecommication is essentially an undertaking of a commercial and highly technical nature it is considered that some form of "Board" or "Authority" is desirable, even if it has to be subsidised by Government during its early years of operation. It is therefore recommended that:

1. A Telecommunications Authority be established consisting of a Board of Directors appointed by the government with the Postmaster General as Chairman of the Board.

2. That the Policy and Planning Committee supplemented by representatives of the Department of Justice and the Treasury

and the Public Utilities Authority draft proposed legislation for establishment of the Authority.

3. That negotiation be entered into with an experienced organization to direct the management and operations of public telecommunications.

The following paragraphs outline in more detail solutions to some of the problems which this proposals raises:

I. Relationship of the Authority to the Department:

The traditional arrangements have been that Post, Telephones, and Telegraph are put together. The present situation in Liberia is one in which the subdivisions of Radio and Telephones each has a commissioner responsible to the Postmaster General via the Deputy Postmaster General. The Radio and Telephone divisions are financed through the budget of the department, and their revenues are paid into the general fund. The present set up does not facilitate the needed close cooperation between various parts of the telecommunications system and makes it difficult to get a clear picture of the costs and revenues for local telephones and domestic and international telecommunications separately.

After the setting up of the Authority, the new relationship with the Department of Posts and Telecommunications will be as follows: The Board will be held responsible to the Government via the Postmaster General. He will remain the main medium through which general government policy, direction and control will be channelled down to the Authority.

The Authority itself will consist of a Telecommunications Board. The Board will have a maximum of nine (9) members including a minimum

of two (2) from the private commercial sector. One (1) member, apart from the Chairman, should be from the Central Office at the Department of Posts and Telecommunications. One (1) each from the Treasury, the Department of Planning and Economic Affairs and the Department of Justice. The two (2) present Commissioners from Radio and Telephones should also be on the Board.

The Postmaster-General will be Chairman of the Board. There will be one Chief Executive Officer or the Authority who will be in charge of administration, planning and development. He will be paid a salary to be determined by the Board. The Chief Executive Officer will be Vice-Chairman of the Board. One of the present commissioners of communications should become Chief Executive Officer.

The question of the payment of the Board should be considered by the Board itself after it has been set up, and a recommendation made to the government via the Chairman.

II. Functions of the Board;

The Board will have the usual Business Corporation Rights and Powers. It will be responsible for the general supervision of the management, formulating policies subject to presidential approval; the enforcement of approved Government policies; the procurement of Auditors for the Authority's accounts and the preparation of the Annual Reports to the President and the Legislature for submission by the Chairman of the Board

III. Functions of the Management:

The management will be in charge of the day-to-day operations of the Authority but will be under the direct supervision of the Board.

Its activities will be within the limits set by general Government policies as interpreted by the Board. The following are some of the major areas in which the Management will be concerned.

A. Financial:

The Management will prepare the Budget of the Authority. The Budget will then be submitted to the Board for approval. The Board will then request from the Government the necessary subsidy up to the maximum which will be stipulated in the Legislation setting up the authority.

The Management will also be concerned with the collection of revenues, settlement of financial obligations, cooperation with the auditors and the maintenance of the accounting system. The Management will so maintain the Authority's accounts that both revenue and expenditure are identified with respect to each of the various services separately and the profitability or otherwise of each of the various services separately demonstrated.

B. Technical:

This involves both operational management and maintenance management:

a) Training Program:

The Management will develop a realistic long-term training program which will be submitted to the Board for approval.

b) Long-term Planning:

The Management will also be required to work out and present development plans for the improvement of the telecommunications system. These plans have to be approved by the Board before they can be implemented.

c) Reporting:

The Management must prepare regular monthly reports on the operations of the system in as much detail as possible and sumbit these to the Board.

d) Personnel Policies:

The Management should follow as closely as is practicable the normal personnel policies used by business corporations. The contracts of expatriates must be approved by the Board prior to execution.

IV. Type of Company Required:

The Authority should contract with an experienced management company, preferably with experience in operating telecommunications in either developing or developed countries. It should be pointed out that the firm which will demonstrate a potential ability to attract foreign financing will have the advantage in the selection process.

V. Existing Staff:

The Management company should be required to take over the existing staff completely for a probation period of three (3) months during which the Authority will assess the qualifications and capabilities of its staff, and revise if necessary the complement of said staff.

Chapter 8

PUBLIC UTILITIES

A substantial expansion of public utility facilities will be made during the Plan. Investment in these installations is dedicated to ensuring an adequate and dependable electric power supply for industry and commerce, providing a modern water and sewerage system for the capital and environs and offering sanitary water supplies for major towns. These programs contribute to improved health and higher productivity of people.

I. General Objectuves:

The general objectives are:

1. Provide reliable electric service at reasonable cost to centers of major population concentration.

2. Establish a safe and adequate potable water supply for Monrovia and major towns.

3. Establish a sanitary sewer system in Monrovia adequate to meet the needs of the increasing population in the nation's capital city.

4. Seek to lay the groundwork for regional power planning leading to the interchange of power with neighboring countries where technically and economically feasible. This aspect of regional cooperation offers future savings in investment in power facilities and an additional impetus to the development of the West African sub-region.

II. Public Utilities Authority:

In 1962 the National Legislature created the Public Utilities Authority (PUA) as an automous specialized agency of the Government, controlled by a Board of Directors, and empowered to operate and maintain

all generation and sales of electricity as well as water and sanitary sewer facilities in the nation.

An agreement between Government and the PUA signed 30 March 1966 specifies that all financial obligations between Government and the PUA will be recorded in a special clearing account as they fall due. The PUA's present obligations to Government in this special clearing account consists of principal and interest on loans contracted by Government on behalf of the PUA. Government's obligations to the PUA, on the other hand, consist of: electricity consumed by Government at the rate of 4¢ per Kwh, water consumed by Government at the rate of $1 per 1000 gallons, a subsidy based on the actual cost of operation of the electric systems outsaide Monrovia and a subsidy of $90,000 annually for Monrovia street lighting and traffic control. A subsidy is to be agreed upon for the operation of the Monrovia Sewer System.

At the end of each calendar year balances in the favour of Government in the special clearing account are transferred to a special reserve account kept by the PUA. By mutual agreement these funds may be used to service PUA debts or finance capital additions to the PUA system. Balances in the clearing account in favour of the PUA are settled at the end of each year by cash payment to the PUA.

The total cost of the public utilities programs is summarized in Table 8.1:

Table 8.1

PLAN PUBLIC UTILITY INVESTMENT PROGRAM

($ 000,000)

	1967	1968	1969	1970	Total
Power					
External Financing	.300	.100	.300	2.270	2.970
Domestic Financing	1.200	.750	.530	.777	3.257
Sub-Total	1.500	.850	.830	3.047	6.222
Monrovia Water Program					
External Financing	4.000	3.000	-	-	7.000
Domestic Financing	.400	.400	-	-	.800
Sub-Total	4.400	3.400	-	-	7.800
Monrovia Sewer Program					
External Financing	2.000	4.200	1.000	-	7.200
Domestic Financing	.200	.400	.200	-	.800
Sub-Total	2.200	4.600	1.200	-	8.000
Municipal Water Systems					
External Financing	-	.270	.720	.720	1.710
Domestic Financing	-	.030	.080	.080	.190
Sub-Total	-	.300	.800	.800	1.900
Total Public Utility Investment					
External Financing	6.300	7.570	2.020	2.990	18.880
Domestic Financing	1.800	1.580	.810	.857	5.047
Grand Total	8.100	9.150	2.830	3.847	23.927

The PUA is following a ten year manpower program. At present the organization is manned as follows: management team - 7, other expatriate personnel - 21, Liberian personnel - 503. By 1975, staffing is forecast to be as follows: expatriate personnel - 5, Liberian personnel - 342.

Table 8.2 summarizes the evolution of public utility permanent manpower requirements over the Plan.

Table 8.2

SUMMARY, MANPOWER REQUIREMENTS

Year	Expatriate	Other Supervisory	Semi-skilled & Other	Total
1967	22	51	418	491
1968	22	54	401	477
1969	18	58	394	470
1970	14	62	248	324

There will be an excess of personnel, relative to targets, in the first two years of the Plan. This will be the result of temporary hirings to make meter and house connections for the water system. The PUA has assumed this responsibility as an economy measure to reduce the contracted cost of the system.

Recruitment and training to meet these requirements include the following activities: testing, formal schooling (in literacy, elementary, secondary, college and business courses, usually with books and tuition

provided by the PUA); technical training in hydroelectric plan operation and sewer and water operations; on-the-job training (includes courses in electrical theory, diesel operation and maintenance, radio communications, general accounting, water and sewer system operation and driver training.

III. Power Program:

The national public power system comprises seven diesel generating stations and one large hydro-electric station of 34,000 kw. at Mount Coffee. Total installed capacity as of December 1966 was 55,490 kw. An additional 50,000 kw., under private ownership, is installed at major industrial concessions and in remote localities. Three of the public stations are in the Monrovia area and one in Robertsport, Buchanan, Greenville, Harper and Sanniquellie.

The Government is planning to invest $5.5 million to meet an estimated average annual load growth of sixteen percent over the plan period. This growth estimate, which in turn established physical facility targets, was derived from consideration of the following factors: addition of new customers, increased levels of consumption by individual customers, enlarging the system's service area, added industrial load and the anticipated rate reductions.

It is estimated by PUA that generating Units 1 and 2 (34,000 kw) installed at Mount Coffee Hydroelectric Station will meet anticipated demand for electric energy during the Plan Period. Table 8.3 gives the details of planned investment in electrical facilities during the next

four years. Early in the next plan period it will be necessary to make additional major investment in the power system for Mount Coffee upstream storage and Mount Coffee Hydro Units 3 and 4. During the present plan it is estimated that power generated will rise from 139,300 MKH annually in 1967 to 217,500 MKH in 1970.

Table 8.3

PLAN POWER PROGRAM - INVESTMENT PROJECTS
($000,000)

Project	1967	1968	1969	1970	TOTAL
Mt. Coffee Hydroelectric Station Phase 1/					
External Financing	.300	.100	.300	2,270	2.970
Domestic Financing	-	.005	.030	.227	.262
Sub-Total	.300	.105	.330	2.497	3.232
P.U.A. Minor Capital Additions and Replacements 2/	.700	.500	.500	.550	2.250
Total Power Program Investment					
External Financing	.300	.100	.300	2.270	2.970
Domestic Financing	.700	.505	.530	.777	2.512
Grand Total	1.000	.605	.830	3.047	5.482

1/ Units 3 and 4 and upstream storage

2/ Includes transmission line expansion etc., financed by PUA current operating Revenue.

IV. Monrovia Water System:

Prior to 1954 Monrovia was entirely dependent upon shallow wells and cisterns. The existing water system serving some 4,500 customers in an area limited to downtown Monrovia and parts of Sinkor, Congo

Town and Bushrod Island, meets only a small part of the city's water needs. In recent years there has been an increasing and uneconomic private investment in wells.

Engineering studies have been completed for a new $7.8 million public water system having an average capacity of eight million gallons daily (MGD) with provision for expansion to 24 MGD. Construction of this system will begin in 1967. Table 8.4 presents a projection of the estimated growth of customers and water consumption over the plan period.

Table 8.4

MONROVIA WATER SYSTEM ESTIMATED CUSTOMERS AND WATER USE

	1967	1968	1969	1970
Customers				
Residential and Commercial	5,400	7,000	8,500	9,000
Industrial & Large Commercial	16	16	17	18
Government	345	346	346	346
Total	5,761	7,362	8,863	9,364
Water Use (1,000 Gal/Year)				
Residential and Commercial	372,240	431,600	681,000	672,000
Industral & Large Commercial	125,300	129,000	134,810	140,860
Government	200,000	250,000	300,000	300,000
Total	697,540	810,600	1,015,810	1,112,860

A loan totalling $7 million has been negotiated between the Government and the United States Agency for International Development. Interest charges to Government are one percent for the first ten years and two percent on the unpaid balance thereafter. The Government will spend $800,000 for local costs of the project. The PUA will repay the principal and interest to Government at the rate of 3½ percent.

The following rate schedule is proposed, commencing in mid-1968:

Proposed Rates Monrovia Water System

Minimum monthly bill	$2.50 up to 2000 gallons
Next 18,000 gallons per month	.85 per 1000 gallons
Next 80,000 gallons per month	.75 per 1000 gallons
Excess	.60 per 1000 gallons

The target at the end of the plan period is 9,000 connections.

V. Monrovia Sanitary Sewer System:

The present system, constructed in 1953, discharges raw sewerage into the Mesurado River and the Atlantic Ocean. It has an estimated 1,100 connections. Commercial establishments and homes not connected to this system have septic tanks, outdoor privies or no sanitary facilities.

The new Monrovia Sanitary Sewer System is designed to have an average capacity of six million gallons daily (MGD), with an ultimate capacity of 24 MGD. It will include 5,000 house laterals for the present Monrovia system and extend the system to Bushrod Island and Sinkor. All sewerage collected will be treated before discharge. The new system will be constructed under a loan from USAID totalling $7.2 million. Interest charges to Government will be one percent for the first ten years and 2½ percent thereafter. The Government will spend $800,000 for local costs of the project, bringing total investment to $8 million. The PUA will repay principal and interest to Government out of operating revenue at the interest rate indicated above.

The proposed sanitary sewer rates will be 60 percent of the charges for water. The plan target calls for 35 percent of the estimated 14,000 households in the system's service area being connected by the end of 1970.

VI. Rural Water System:

The present water needs of large towns are supplied from shallow wells ranging from 10 to 25 feet in depth or from nearby streams or rivers. None of these sources are adequately protected from contamination. Inadequate toilet facilities are often located in the immediate vicinity of these water sources. This undesirable condition contributes to intestinal and other diseases in these areas.

Preliminary engineering studies and cost estimates completed in towns listed below call for drilled wells, pumps, filters, treatment plant, earthwork, and required buildings. The cost estimate for each system takes the following variables into account: population, distances to and nature of water source, length of streets, height of buildings, required power supply etc. The proposed systems will supply approximately 40 gallons of potable water per capita daily.

Municipal Water System Program

City	Investment Estimate
Buchanan	$ 550,000
Gbarnga	250,000
Greenville	350,000
Harper	500,000
Robertsport	200,000
Sanniquellie	250,000
Tchien	100,000
Voinjama	210,000
Total	$2,410,000

It is proposed that appropriate financing be sought during the plan period for these public works projects. It is hoped that construction of the first system can begin in 1968.

Chapter 9

NATURAL RESOURCES

Presently iron ore, diamonds and gold are being exploited in Liberia. Priority is given to the detailed investigation and appraisal of other known minerals with the aim of diversifying the mining industry, and to the preparation of a geological map of the country. The Mining Service of the Bureau of Natural Resources is directing major emphasis toward assistance of the miners in the utilization of correct mining methods in accordance with the law and recognized safety standards.

A topographic mapping program is being carried out to provide required geographical data needed in the planning and execution of the basis for special purpose mapping outlays.

Cadestral Surveys are proposed to ensure clear titles to land. This will minimize title disputes and also indicate the persons and establishments responsible to Government for the taxes.

1. General Objectives:

The general objectives are:

a) Continue and expand the Geological Survey now under way.

b) Continue to collect basic data required for the identification and exploitation of Liberia's natural resources.

c) Continue to determine and disseminate geographic data indicating the earth's physical features as well as man-made improvements thereon and to provide reference beacons for a unified geographic control of all surveys.

d) Seek to clarify land titles and accurately define boundaries of private and public lands.

e) Continue to develop closer cooperation with the mining concessions and improve on the effective control of such operations in accordance with the laws and regulations of the Republic of Liberia.

II. Plan Goals:

a) To complete the present topographic and geologic mapping projects, to monument reference beacons already established, to collect data from other agencies for a topical mapping program and to reactivate the hydro-graphic and other operational services of the National Cartographic Service.

b) To collect regular information necessary for evaluation of the country's water resources.

c) To improve the service provided to the mining industry, and institute training programs for the improvement of mining methods.

d) To integrate the Cadastral Survey data into the coordinate system of the existing topographic map of Monrovia and vicinity and the existing Photo Mosaic System of the country, to assist the courts in determining true titles t land, to collect data on property location for subsequent integration into the over-all system when topographic maps of the areas become available and to assist in the demarca tion of real estate.

III. Plan Programs:

The following programs are proposed:

A. Geological Program:

a) Geologic Mapping:

Reconnaissance geologic mapping will be continued at scale 1:40,000 as a basis for compiling and publis ing scale 1:250,000 geologic maps showing the over- geologic framework of Liberia. The resulting data

contribute materially to the utilization of the full potential of the geophysical survey. The combined geological and geophysical data can then be used as a planning base so that future groundwork can be scheduled on a priority basis in the most economically promising areas of mineral occurrance. Completion of geological maps is planned for implementation on the following schedule:

1967: Voinjama and Bopolu Region;

1968: Monrovia, Zorzor and Nimba Regions;

1970: Putu, Buchanan, and Harper Regions.

b) Mineral Resources Appraisal:

Favourable mineral prospects will be evaluated by interpretation of detailed mapping results, and application of aeromagnetic and airborne radiometric surveys, resistivity surveys, geochemical prospecting and physical exploration such as pitting and trenching. Already scheduled for systematic investigation are: Kyanite at Hartford, Tin at Nimba, Base metal at Tawalata and Bombema, Manganese at Zorzor, and Bauxite at Karloke. A preliminary report on the investigation of rich barite vien deposits which occur in the Gibi Area has been released. A map showing the locations of known occurrences of mineral deposits in Liberia will be compiled and published.

c) Airborne Geophysical Survey:

A geophysical survey will be started early in the Plan period so that the results can be fully utilized in the current geological mapping and mineral resources appraisal program. This will result in both a saving of time and increased accuracy in mapping and evaluation. The geophysical data will be utilized as a direct guide to magnetic economic minerals and as an aid to solving geologic problems in the mapping program. Flying will be undertaken in 1967 and 1968 with interpretation of results in 1968 and 1969.

The efforts of both the geologic mapping and the mineral resources appraisal are supported by the U.S. Agency for International Development. It is expected that similar assistance will be obtained for the airborne geophysical survey.

d) Geochronology:

The Geological Survey will cooperate with foreign geological institutions in determining the geochronology and correlation of Liberian rock units. This involves the determination of absolute age of rocks by analytical radiometric methods and relative age by field and laboratory methods.

e) Publications:

The results of activities and technical investigations of Geological Survey will be made available through the following media.

1. Technical Letter Series (un-published)
2. Bulletin Series (published)
3. Special Paper Series (published)
4. Geological Map Series
5. Publication in Technical Journals.

f) Training:

Participant training programs will be arranged and implemented for Liberian students with aptitude in the sciences. Training will culminate in obtaining Bachelor of Science degree in Geology as well as advanced degrees for qualified students. In-service advancement of the scientific skills of the staff members and field and laboratory assistants will be undertaken in training sessions and practical work.

B. Cartographic Service:

1. Long Range Program:

This entails a rehabilitation of all cartographic organizational branches so as to make possible the following:

a) Large scale topographic mapping of areas of Liberia selected to meet the needs of economic and physical development programs;

b) Recovery of disturbed monuments and extension of existing control density and monumentation to meet the requirements of;

c) Large scale topographic mapping and of all other field surveys; a placing of depth contours and obstacle location in the topographic maps of coastal and other submerged areas;

d) Preparation of topical map overlays showing geographical and projected features from data geographically positioned;

e) Geographical control of low altitude airborne data recordings to facilitate cadastral, scientific and evaluation studies and layout-work of other agencies that require low-altitude photography;

f) Training of junior personnel units.

2. Short Term Program:

The Liberian Cartographic Service in conjunction with the 72nd Engineer Detachment of the U.S. Army (USAID) will continue field photoclassification and identification of horizontal and vertical control beacons already established and maintain monument establishment and recovery teams. It will render service to the Aerial Photography Project (USAID) and assist in the photo-grammetric work, in the computations, the charting and the final drafting of the topographic maps of the joint project and will arrange for the printing of the topographie maps. Printed topographic maps of Liberia will be made available at scale 1:250,000; coastal and industrial areas at scale

1; 50,000 and of selected cities at scale 1:12,500. Manuscript "Smooth sheets", aerial photographs and controlled annotated mosaics on UTM or Hotine projection will be made available for scientific studies and planning by other agencies. Horizontal and vertical control points used for the geographical positioning of the topographic details will be monumented to provide reference data for all field surveys and records of their coordinate value will be disseminated in graphical and columnar representations.

C. Hydrological Survey:

At present there is a small hydrological section in the Department of Public Works. Efforts will be made to bring about centralization of hydrological work under the Bureau of Natural Resources and Surveys, making full use of personnel, equipment and experience available at the Department of Public Works in this field. It is proposed to set up a total of 24 stations on all main rivers to provide the basic stream flow statistics necessary for future hydrological development.

D. Mining Service:

The Mining Service will carry out the following programs:

a) Improve the quality of technical services rendered to the mining industry by arranging training programs for technical assistants, field foremen and drill crew personnel.

b) Evaluate known gold and diamond deposits and carry out an exploratory study of gold, diamond and other placers to determine original sources. To achieve this, the drilling crew and survey teams will be reactivated.

c) Instruct small miners in more effective mining methods. At least one mining engineer will be stationed in each of the three major gold and diamond areas for this purpose.

d) Make periodic inspection of all concession mining operations and enforce mining laws and regulations throughout the country.

E. Cadastral Survey:

Great confusion exists today with regard to land ownership. Prospective buyers of property can rarely purchase land with complete assurance that vendors have clear title to the land in question. The causes of this situation are: absence of compulsory title registration; absence of a coordinate system for land survey; absence of a Registration Office providing permanent records of land ownership and permitting a conclusive title search.

Monrovia Pilot Project: In order to improve this situation a detailed pilot project will be worked out for the establishment of a Title Registration Office in Monrovia and a cadastral survey of 1,200 acres in the Monrovia area. External assistance will be sought for the preparation and execution of this project. The scope of the project in Monrovia will include the following:

1. In-service training and up-grading of Surveyors of the Cadastral Survey of the Bureau of Natural Resources & Surveys.

2. Compilation of an accurate cadastre of Monrovia.

   a) For use by the Bureau of Revenues in the preparation of index maps of real properties and owners for Real Estate Tax Evaluation and Collection.

b) To lay the ground work for periodic revisions of cadaster, due to new construction, new roads, running of easements, etc.

c) To define river boundaries accurately with particular reference to tidal action.

d) To avoid confusion and disputes and to eliminate overlapping in adjacent properties.

e) To secure accurate coordination of all surveys.

f) To locate and protect all government land.

g) To insure the authenticity of all surveys and maps for title deeds.

h) To regularize the practice of surveying.

The approximate area of the Project between St. Paul's Bridge and including Paynesville would not exceed 100 sq. miles.

It will be necessary during the period of the proposed Pilot Cadastral Survey Project for the Cadastral Survey of the Bureau of Natural Resources and Surveys to continue to execute routine service in keeping with statute requirements.

IV. Estimated Government Expenditure:

Proposed activities during the Plan period are estimated to cost as follows:

Table 9.1

DEVELOPMENT ACTIVITIES - NATURAL RESOURCES

($000)

Program	1967	1968	1969	1970
Existing Programs	112	171	155	160
New Programs	30	184	366	235
Additional Support Costs	-	382	338	413
TOTAL	142	737	859	808

Chapter 10

INDUSTRY AND COMMERCE

In the acceleration of economic growth, the development of industry and commerce is considered to be of great importance. Such development will contribute to the productive employment of the unemployed and underemployed and will reduce the volunerability of the economy to fluctuations in the prices of agricultural crops. It will also make a substantial contribution towards the attainment of sustained economic growth.

During the plan period increasing emphasis will be given to the manufacturing industry. Further steps will be taken towards the creation of the basis for a more vigorous industrial sector.

General Objectives:

The general objectives are:

a) to encourage industrialization by continuation of the Open-Door Policy which has brought spectacular progress to the country for the past two decades and also for continuation of the special incentives to industries as outlined in the Investment Incentives Act;

b) to stimulate increased Liberian participation in industrial and commercial activities.

INDUSTRY

I. Large Scale Enterprises

At this stage of development when adequate Liberian capital and technical know-how are not available for large-scale industries such

as the steel mill, oil refinery, oil palm mills, cement plant, and textile mill, foreign participation will have to be sought for such large projects.

In addition, to ensure economy of scale for such projects, efforts will be continued to broaden the market through West African sub-regional economic cooperation.

A. Iron Ore Production and Processing:

At present Liberia's national income depends to a large extent on the mining and export of iron ore. Its importance to the economy is apparent from a comparison between the 1966 iron ore sales of mining companies of $118 million and the estimated 1966 gross domestic product of $275 million.

Government policy towards the exploitation of iron ore resources has been directed to: a) increased production by extending mining concessions to foreign investors on attractive terms; b) increased Government revenues from these concessions; and c) increased Liberian participation in mining investments.

As a result of this policy, production has increased over the last decade from 2 million tons in 1956 to nearly 18 million tons in 1966. The contribution of iron ore mining to Government revenue is estimated at over $8.5 million in 1966. Equity participation of individual Liberians and the Liberian Government in mining companies has become very important. In fact, one mining company is almost entirely owned by Liberian nationals and the Government.

As shown in Table 10.1 reserves are adequate relative to foreseeable levels of exploitation.

Table 10.1

LIBERIAN IRON ORE DEPOSITS
(of presently exploited areas only)

CONCESSION	Proven Deposits	Other Deposits	Iron Content
	(Million Tons)		(%)
Bomi Hills			
Direct Shipping	13	50	60
Mill feed	11	50	37.5
Mano River			
Direct Shipping	56	40	55
Nimba			
Direct Shipping	255	500	64
Bong			
Mill Feed	240	260	37.5
TOTAL	575	900	-

Additional deposits are currently being explored in the Putu and Wologisi Ranges, Bie Mountains and the Bassa Hills.

These reserves may be compared with total African iron ore reserves estimated by the United Nations at 5 billion tons. Between the Sahara and Rhodesia the largest reserves lie in Liberia, Gabon, Guinea and Mauretania, in that order. The entire production of all four countries is exported. In

view of the intense competition in the world iron ore market, close cooperation between Africa and other ore exporting countries is of the utmost importance to Liberia.

Exploitation of new deposits in Africa, West Australia and elsewhere continue to further depress world market prices. Further, a preliminary analysis of iron ore trade statistics tends to show that the prices Liberia obtains for its ores compare unfavorably with average prices of ores of comparable quality from other sources. This situation requires further study.

Liberia's mining companies have reacted to the highly competitive situation in the iron ore market. Both LAMCO and Bong Mines have planned or started construction of pelletizing plants of 2 million tons capacity each. As shown in Table 10.2, at the end of the planned period the combined output of these plants will reach 3 million tons of pellets, slightly increasing the total volume of ore exports. Also, 8 million tons of ore now shipped in the form of concentrates will be pelletized.

The next stage in the processing of raw materials to improve the competitive position of Liberian ores may consist of addition of flux to the pellets and possibly, later, in their pre-reduction. The value added in the latter process is in the order of $6 per ton over the price of regular pellets.

B. Steel:

The major step in Liberia's transition from a primary commodity exporter to a manufacturer of finished products will be the construction of

the Buchanan steel plant.

Important progress in the preparation of this project has already been made and it is hoped that by the end of the plan period a definite project will have emerged. Studies carried out under the auspicies of

Table 10.2

LIBERIAN IRON ORE EXPORTS

Iron Content (%)	Volume (million tons)	Value ($Million)	FOB Price per ton ($)	Volume (million tons)	Value ($ Million	FOB Price per ton
63-67	10.0	70.0	7.00	10.0	70.0	7.00
53-57	3.8	19.8	5.20	3.8	19.0	5.00
63-65 Concentrate	4.0	28.0	7.00	3.0	2.4	6.80
65 Pellets	-	-	-	3.0	33.0	11.30
TOTAL	17.8	117.8		19.8	143.3	

the Economic Commission for Africa (ECA) and by the Liberian Government have proved that steel can be produced in West Africa at competitive prices and that the most economic location for a West African integrated steel plant is at the Port of Buchanan in Liberia.

As a basis for seeking financing for the project, the United Nations Development Program has agreed to underwrite a complete and independent

project evaluation fulfilling the requirements of international sources of credit. This study will be completed in 1967.

The proposal by Liberia to create a West African Iron and Steel Authority is of significance to the economic development of the sub-region and will be actively supported during the plan period. This Authority, which in turn will be a part of the overall machinery for economic cooperation in West Africa, will support a truly rational and coordinated development of the iron and steel industry in West Africa.

C. Oil Refinery

The construction of a refinery, Liberia's first major industry creating end use products, is presently in progress, financed by private foreign investors at a cost of $10 million. The capacity of the refinery will be 10,000 barrels of crude oil daily. Present plans call for the production of gasoline, jet fuels, diesel oil, fuel oil and asphalt. It is scheduled to go on stream in 1968 employing 250 persons.

D. Tire Factory

Negotiations are in progress for the establishment in Liberia of a plant for the manufacture of vehicle tires and tubes. Preliminary estimates indicate that an $8.5 million plant employing 125 persons (initially including 15 foreign technicians) with a minimum annual production of 125,000 tires would require export sales of about $3 million annually in addition to meeting the requirements of the Liberian market.

E. Cement Factory

A cement clinker grinding plant with an annual capacity of 125,000 tons of cement, employing 65 persons, is to be completed in 1968 at a cost of $2 million. Production is expected to reach 100,000 tons in 1970, with a value of about $2.5 million.

III. Encouragement of Liberian Participation:

Liberia participation in projects of the type mentioned above will be encouraged. Efforts will be made to interest Liberian investors in participation in these ventures.

The development of industry depends largely on the initiative of private investors. Government will, however, give high priority to the expansion of those existing industries and the establishment of those new industries which offer greatest opportunities for broader and more active participation of Liberians.

IV. Selective Protection of Industry:

It is desirable to promote industries which develop forward and backward linkages. A complex of inter-related industries will envolve slowly. In this context, emphasis will be given to promoting industries which contribute to an inter-related industrial structure; and in particular the development of multi-product complexes utilizing local raw materials.

V. Investment Incentives:

The Liberian investment climate is characterized by a unique combination of political stability, free movement of capital and reasonable

levels of taxation. In addition to this generally favorable investment climate the following incentives are also provided by Government:

a) Investment Code - The investment code, salient provisions of which are presented in Annex I, provides for a number of benefits to new investment projects; exemption from customs duties and income tax, tariff protection, etc.

b) Industrial Park - An industrial park has been created to accommodate new industries. A track of 1000 acres has been reserved for this purpose.

c) Feasibility Studies and Promotion - The Liberian Development Corporation provides the services of economists, marketing specialists, accountants and agricultural processing experts to interested investors for the preparation of feasibility studies.

d) Credit - The Liberian Bank for Industrial Development and Investment (LBIDI) grants loans for projects up to 40% of total capital requirements and participates up to 25% of the equity.

This Bank promotes the development of a capital market in Liberia and will establish a small loan program for local entrepreneurs, including an accelerated procedure for obtaining loans up to $10,000. It will also contribute to the development of small industries by organizing the supply of equipment under hire-purchase arrangements.

The quality of Liberian industrial products must meet international standards. The Bureau of Standards will take such measures as are necessary to maintain these standards.

VI. Manpower and Training:

At present some 6,000 persons are engaged in industrialactivity in Liberia. It is estimated that the manpower requirements for the expected development of the industrial sector during the plan period total some 1,200 persons.

Qualified Liberian industrial workers are needed to meet the requirements of industry. On-the-job training of workers will continue to provide the main source of trained manpower. The Division of Vocational Training in cooperation with the Bureau of Labor will evaluate on-the-job industrial training programs and make such proposals as may be appropriate for improving the efficiency of this type of training. Another source of trained manpower is the existing vocational schools. To meet the increasing demand, the educational plan calls for an expansion of formal training in this area, with assistance from external sources.

COMMERCE

The Open Door Policy which has succeded over the years in attracting foreign investment into the commercial sector of the economy will continue, but the role of Liberians in the commercial life of the country should be increased. Liberian businessmen have a vital role to play in the development process. Therefore, steps will be taken to overcome identified obstacles which have hindered the entry of Liberians into commerce.

The Liberian Bank for Industrial Development and Investment will extend credit to Liberian businessmen on terms more favorable than those provided by commercial banks. Technical advice will also be made available.

The law prohibiting foreigners from operating as commercial carriers in public transportation will be vigorously enforced to ensure Liberian ownership and control. Measures will be taken to reserve other specific activities for Liberian citizens.

COST

The public activities proposed in commerce and industry are largely a continuation of work already being carried out by existing agencies: the Department of Commerce and Industry, the Liberian Development Corporation, and the Liberian Bank for Industrial Development and Investment.

Additional allocations for commerce and industry during the plan period will be as follows: 1968 - $50,000: 1969 - $50,000; 1970 - $100,000. This will support such additional programs as may be developed for the promotion of industry, feasibility studies, training of Liberian industrialists and activities related to the Industrial Park. Foreign aid will be sought to supplement these funds.

Annex 1

EXTRACTS FROM THE INVESTMENT INCENTIVE CODE

Section 3 Application of this Act.

1) Incentives may be granted to persons, partnerships, corporations or other entities undertaking new investment projects in Liberia.

a) to process, fabricate or assemble raw materials and/or semi-finished products into commercial products;

b) to engage in other production activities such as agriculture, logging and fishing and investing money, credit, machinery, equipment or other assets toward establishing the facilities for the purposes mentioned;

2) An Investment Incentives Contract shall be granted only in respect of those projects or industries specified in sub-Section (1) of this Section, after taking into account priorities established by the National Planning Agency, which can be expected to contribute effectively to the economic development of Liberia.

3) All persons or entities seeking tax or other privileges as incentives for new investment in Liberia shall do so under this Act, provided that all rights and privileges which have been granted to enterprises doing business in Liberia prior to the enactment of this Act shall remain unaffected by the operation of this Act.

4) An Investment Incentives Contract shall be negotiated by the Government of Liberia with the sponsor or sponsors of a New Investment Project.

Section 4. Tax Benefits.

Enterprises that are granted Investment Incentives Contracts shall be entitled to the following tax benefits with respect to the Approved New Investment Projects:

1) construction materials - exemption from customs duties, tax levies and other charges except consular fees on approved imports of machinery and equipment, construction materials and supplies necessary for the provision of facilities for the enterprises:

2) raw materials - exemption from customs duties, tax levies and other charges except consular fees on raw, semi-processed or processed materials required in the manufacture of articles in respect of which the New Investment Project has been approved, for a period of five years from the first importation.

Exemption from income taxes:

1) Exemption from taxes on income derived from an Approved New Investment Project for a period of five years from the first year of marketable production, as determined by the Government.

2) Approved New Investment Projects involving substantial new investments with prospects of large direct benefits to the Liberian economy may be granted exemption from taxes on income derived from the Approved New Investment Project for a period of five to ten years from the first year of marketable production as determined by the Government. In the case of agricultural projects special consideration shall be given to the length of the period required to reach production as well as the size of the investment.

Section 5. Additional benefits - The following additional benefits may be made available at the discretion of the Government, upon application by the sponsor or sponsors of the Approved New Investment Project.

a) the lease of available land for plant space in any government-owned industrial park at a preferential rate established for the rental of such land during the term of the lease;

b) the securing of loans contribution of equity capital, guarantees, under-writing services or other technical assistance made available by any agency of the Government of Liberia;

c) Tariff protection subject to approval of the Legislature and the enactment of reasonable excises on all commodities that are subject to such tariff protection. The amount of such excises shall be enacted by the Legislature in the determination of tariff protection, for a period deemed necessary to establish normal production and markets.

The Government shall use its best efforts to expedite the issuance of entry and exit permits, working permits and permits of residence to all foreign personnel, including foreign managerial, technical and skilled

personnel in such numbers and for such periods as may be necessary.

Section 7. Application procedures - Applications for Incentives shall be addressed to the Secretary of Commerce and Industry in a prescribed form, with copies for the National Planning Agency and the Treasury Department. The application shall include the following information:

a) Name, address and biographical data of the sponsor or sponsors.

b) Banking references.

c) Organization and domicile of the sponsor's business.

d) Detailed description of the investment project, including the nature of the business; proposed general location; date proposed for commencement of operations: volume and types of products or services to be supplied; land, buildings and machinery required; materials and labor required, and their proposed source of supply; total investment projected for the first five years of operation; and initial amount of capitalization, classified by class of stock and other obligations.

e) Additional benefits requested to the Liberian Government under Section 5 of this Act.

f) Tariff protection, if any, deemed necessary, indicating estimated costs of production, relationship to current import prices and other relevant information, in accordance with guidelines established by the National Planning Agency.

g) A technical and economic feasibility report in accordance with guidelines established by the National Planning Agency.

Chapter 11

EDUCATION AND SOCIAL WELFARE

EDUCATION

Physical facilities for education have expanded rapidly in recent years. Complementary elements of an improved educational program, such as teachers, educational materials and supplies, have not kept pace with the expansion in physical plant. Though the need for physical facilities is still great, emphasis in this plan is placed on improving the qualitative aspects of the educational system.

Planning for this qualitative improvement requires adequate and reliable statistical data. Though much progress has been made in this field in recent years the inadequacy of the statistical base was a limiting factor in the planning effort for this sector. This inadequacy of data has been further complicated by a lack of an appropriate breakdown of the budget of the Department of Education. The budget categories presently used make it impossible to cost individual programs or levels of education. Thus, this chapter is, to a large extent, merely an identification of qualitative problems and policy recommendation for their solution.

It is proposed that over the Plan period the Department of Education collect data and carry out the research required to plan the educational system on a sound basis. For this purpose, the Division of Record and Statistics should be strenghtened and made responsible for research and

statistics necessary for improvement of the educational system. It is also important to re-structure the budget of the Department of Education in order that the expenditure on each level and type of education may be determined.

I. General Objectives:

The general objectives are:

a) Achieve universal primary education.

b) Achieve a balanced national educational system within which the expansion of the different levels of education are appropriately linked.

II. Plan Goals:

Major plan goals include:

a) Intensify efforts to improve the collection of data required for educational planning.

b) Enphasize qualitative rather than quantitative improvements in the educational system.

c) Conclude research on the contribution of pre-school education to subsequent scholastic achievement in order to provide a basis for a policy decision on the public pre-school program.

d) Make special provision for over-age students in primary school, tailoring special accelerated classes to their particular needs.

e) Consolidate small junior high schools to increase teaching efficiency and economy of operation.

f) Double secondary school enrollment by 1970.

g) Provide appropriate textbooks at reasonable cost.

h) Increase local scholarships, while emphasizing graduate level training in the case of foreing scholarships.

III. Programs

The estimated number of teachers and enrollment at the various levels at the beginning and end of the Plan is shown in Table II.1. Major programs during the Plan period are:

A. Pre-School Education:

At present there are about 21,000 children enrolled at this level, of whom about 80% are in Government schools. This category includes kindergarten for children four to six years of age and pre-grade classes for children of school age who have not acquired a knowledge of the English language.

Available evidence indicates that kindergraten and other pre-school experience has some positive effect on scholastic performance in later grades. Research in other countries has domonstrated, however, that this contribution is small in relation to the cost of operation of pre-school and kindergarten programs. The Department of Education is currently evaluating the contribution to scholastic achievement of pre-school training in Liberia in order to see if resources so committed would not offer greater return if used to improve primary education.

B. Elementary Education

There are about 800 primary schools - grades one through six - with an enrollment of about 64,000 pupils. Enrollment at this level is expanding spontaneously at the rate of between 7 and 8% per annum. This rate will almost certainly be maintained at least through 1970. It is recommended

that no action be taken to stimulate greater enrollment. Emphasis rather, will be placed upon improving the quality of elementary education.

The primary level of education serves as the first rung of the educational ladder. The very wide range of age distribution at this level presents administrative as well as psychological problems to the over-age pupils and teaching and disciplinary problems to the teacher sufficient to warrant a division in the level. It is therefore recommended that the primary level be divided into two main streams according to age groups: (1) the regular primary school with pupils not more than three years older than the age standard for their grades; and (2) over-age primary school with pupils more than three years older than the age standard.

The older students would receive basic primary education suplemented by learning a craft. The course would last four to five years. This would be long enough for the more mature over-aged pupils to complete the equivalent of six years of regular primary education, and to pass the national examination. Those who did not wish to continue to secondary education would have competence in literacy and useful skills. It is anticipated that most of the instruction would be carried out by regular primary school teachers, usually during afternoons and evenings.

C. Secondary Education:

The secondary level of education serves as the main source of skilled manpower. Upon secondary education depends the country's stock of professionally and technically trained persons, and indeed of educated and competent citizens.

In view of the wide variation in the standard of our schools, it is recommended that the junior high school level provide general academic training with vocational exposure, as was originally intended, and that the senior high school level be diversified to provide four main streams: (1) general academic, (2) technical and vocational (including nursing), (3) teacher training, and (4) home economics. As a means of facilitating such a diversified system, appropriate selection will be necessary on completion of the junior high level. This will therefore necessitate an expansion and strengthening of the testing and guidance service.

Table 11.1

ENROLLMENT AND TEACHERS BY LEVEL

School	1966		1970	
	Enrollment	Teachers	Enrollment	Teachers
Primary Education	85,000	2,600	106,000	2,790
Kindergarten and Pre-School Education	(21,000)		(10,000)	
Elementary Education	(64,000)		(81,000)	
Over-Age Student	-		15,000	
Secondary Education	9,576	460	15,200	550
Junior High School			(,)	
Senior High School	(6,000)		(8,000)	
(Gen.)	(2,400)		(5,500)	
Technical & vocation	(900)		(1,200)	
Teacher Training	(276)		(400)	
Home Economics	-		(100)	
Higher Education	797	104	1,600	150
University of Liberia	(540)		1,200	
Cuttington College	(214)		350	
Our Lady of Fatima	(43)		50	
Grand Total	95,373	3,164	122,800	3,470

In order to maintain the required enrollment level in secondary education and in particular to ensure a flow of qualified students through to senior high school, it will be necessary to take vigorous steps to reduce the drop-out rates. Increased provision for local scholarships is essential for this purpose. It will be necessary also to ensure that curricula offerings as well as textbooks and other educational materials are appropriate in character and quality, and adequately distributed. School libraries and laboratories must be provided if both arts and seiences are to develop. Facilities for learning foreign languages, particularly French, should be improved.

The possibility of furnishing boarding facilities to county high schools for some of the graduates from the distant feeder schools should be considered. During the plan, it would be advisable to provide such hostel facilities on an experimental basis to selected high schools. Finally, it must be emphasized that a supply of dedicated, well educated, and well trained teachers is the most important factor making for an effective secondary education program. It is therefore recommended that the institutions of higher education play an increasing part in teacher education.

The addition of senior high school grades to junior high schools should be limited to schools meeting certain criteria in terms of adequate enrollment and facilities. For example, unless there are sufficient feeder schools in the area to ensure an enrollment of at least 25 for every additional class, the school should not be permitted to expand.

D. Higher Education:

There are three institutions of higher education in the country, the University of Liberia, Cuttington College and Divinity School, and Maryland College of Our Lady of Fatima. Their combined enrollment is presently about 800. Efforts will be made to increase this number to 1,600 which 1,200 will be at the University of Liberia, 350 at Cuttington College, and 50 at the College of Our Lady of Fatima. However, important as is increased enrollment, it is of less significance ultimately, and indeed is largely dependent on an improvement of quality. This is more important than an ambitious building program and the development of new departments and faculties. It is recommended that the University of Liberia in particular should not expand its offering during the plan period, but should concentrate on doing better what it is already doing well. The physical expansion of existing facilities should be kept at a minimum and attention be given primarily to improvement and rehabilitation of existing facilities consistent with the policy of raising the efficiency of the University of Liberia.

There are two interdependent elements in creating and maintaining high standards: teachers and students. Good teachers are attracted and retained by conditions favorable to carrying out their academic work. Generally, these include: high standards of student ability and interest; adequate libraries, laboratories, research assistance, and study leave necessary for scholarly pursuits, conditions of service (salary, retirement and other fringe benefits) competitive with those of other types of employment.

Students, of course, respond to the teachers, but it is important to ensure that the best students are admitted and retained. Adequate provision of local scholarships, loans, and hostel facilities are essential to prevent the loss of good students through financial difficulties. A further element in the retention of good student is the policy affecting foreign scholarships. At present there is excessive reliance on foreign institutions, and because of the strong urge by students to obtain foreign scholarships the local institutions are drained of their best students. The quality of the output and the image of the local institutions are thereby reduced. In view of this, it is recommended that only in areas where training is not available at local institutions should scholarships be offered for undergraduate work at foreign institutions. It is further recommended that the total cost to Government of foreign scholarships be reduced by increasing the use of bi-lateral and other arrangements, without necessarily reducing the number of students studying abroad. The level and type of studies, and the country in which they are pursued by those awarded foreign scholarships, should be carefully selected in order to bring the greatest advantage to the nation by providing the most needed types of manpower.

It is desirable that the university and colleges play an increasing role in the preparation of secondary school teachers and should in fact double their present output during the plan period. For the planned expansion of education, these will be needed in increasing numbers, and, if the country is not to rely even more than at present on foreign teachers,

greater efforts must be made to train them in Liberia. It is recommended that while the teacher training institutes concentrate on preparing primary school teachers, the insitutions of higher learning should establish courses for the training of junior high school teachers. These should be two-year courses, primarily for experienced teachers who have completed training at the teacher training institutes. Such an arrangement has proved highly satisfactory in various other African countries. The arrangements for training of teachers for the senior high school level should continue as at present, but at least the enrollment should be doubled. The institutions of higher education also have an important role in strengthening the productive capacity of the nation's manpower resources through the provision of appropriate evening classes.

In the final analysis, since the university and colleges constitute the apex of the educational system, it is only fitting that their products should be pre-eminent in the service of the nation. In some countries the award of the degree is contingent upon completion of a period of one or two years of national service as a teacher, or in some other socially significant capacity. Such an arrangement would not only have practical value for the educational system, but would inculcate the ideal of service in the flower of Liberia's youth, and do much to promote national integration.

E. Adult Education:

Besides imparting literacy, the emphasis will be on improving workers' skills or teaching them new skills. The program will be related to the immediate environment of the learner. Thus, one type of program will be developed for those working in the subsistence sector and another for those employed in the cash sector of the economy. It is proposed that the adult education center at Klay be reactivated.

IV. Measures to Improve the Quality of Education:

Although considerable progress has been made, educational standards need to be raised considerably further. Consequently, the following suggestions to improve the quality of education are made:

a) Textbooks: Provision of textbooks to all teachers and pupils is absolutely essential. Books must be relevant to Liberian conditions. Adaptation of foreign textbooks as well as books specifially written for Liberian pupils is necessary.

Furthermore, the cost of textbooks must be reduced to bring it within the means of individual pupils or the Government of Liberia. Similarly, funds must be provided for other types of instructional materials and classroom equipment.

b) Building: A lower priority has been accorded during the plan period to construction of new primary schools. At the secondary level, however, the building of schools in selected areas as well as the establishment of five pilot schools with some craft specialization has been given higher priority. Priority is also placed on renovation of existing school building or buildings used for schools.

c) Teachers: Measures for improving both the academic and professional qualifications of teachers include:

1. improvement in teacher' salary scales commensurate with improved qualifications;

2. arrangements for in-service training at the teacher training institutes, the adult education center at Klay, and, for special subjects, at the University of Liberia;

3. provision of foreign scholarships for secondary school teachers of science and mathematics;

4. an additional year at B.W.I. for vocational teachers;

5. introduction of team teaching techniques.

d) Scholarships: Larger provision for local scholarships must be guaranteed by a suitable decrease in the amount now provided for foreign scholarships.

V. Administration and Supervision

An adequate number of professionally qualified supervisors, assistant supervisors, inspectors and directors willbe required to implement the policies in this plan and to ensure that the system grows and functions properly. Accordingly, the institution of an inspectorate is recommented, one inspector to be responsible for 45 schools and three inspectors to be responsible to one assistant supervisor. It is anticipated that each school will be inspected at least once each semester. It would also be desirable to recoganize the Department to ensure greater coordination among all the divisions working at the same level of education or engaged in similar activities.

VI. Supplementary Services

Suitable emphasis must be laid on supplementary services such as testing, guidance, data collection and programming. It is necessary to provide these supporting services with qualifed personnel and adequate funds.

VII. Cultural and Other Programs

More attention than at present should be placed on cultural and other programs of the Department, including physical education, Sandi and Poro Culture, cultural exchange and public libraries.

VIII. Plan Allocation for Education

It is proposed that $29 million be allocated to education for both development and non-development programs over the plan period representing an increase, for the four-year period, of $9 million over the present level of expenditure. This total provides for both the anticipated increase in enrollment and improvement in quality. The tentative annual breakdown of this total allocation is: 1967 - $6.3 million; 1968 - $6.8; 1969 - $7.5 and 1970 - $8.3. Programs to implement the policies specified in the previous sections will be prepared and executed within the limits of the total allocation.

SOCIAL WELFARE

The provision of social welfare services appropriate to the available resources of our developing economy requires careful consideration of: (a) Liberia's traditional solutions for meeting personal crisis and (b) the areas of highest priority in terms of the nation's development objectives. In Liberia, family and tribal relationships have traditionally made provision for the aged, the physically handicapped, the orphan child, etc. The effectiveness of this solution should not be underrated for it will carry the major burden of social welfare activities for a number of years to come.

As the pace of development increases, population moves toward the cities, employment opportunity in industries and concessions encourages abandonment of relatively stable village life, families are often separated and individuals and groups confront new conditions with which they are not fully able to cope.

I. Welfare Services

The emergence in Liberia of voluntary ptivate welfare activities, supplemented by public subsidy, was a logical and practical adjunct in areas of social welfare needs where the impact of rapid growth and related economic and social change had disrupted traditional solutions. Formal private voluntary welfare services include: a Child Welfare Center, Refuge Home for the Aged, a Boys Town, the Liberian Red Cross, a mental institution, a school for the deaf and dumb, and food distribution programs. Most church and mission groups also provide varied though limited welfare services. Government social welfare programs include: youth organizations, rural home economics.

II. Plan Program:

During the plan period efforts will be made to coordinate the activities of all these on-going social welfare services and plan for an expansion of services consistent with highest priority needs and available resources. As a first step in the implementation of this objective, a Social Welfare Division is proposed for establishment within the Department of Education

to make recommendations to Government regarding social welfare problems, coordinate activities of public and private welfare services, make recommendations on the most effective use of grants and subsidies to private welfare services, and seek increased international financial support for priority welfare activities such as training of welfare workers. This Division would also design and begin to implement a specific national social welfare program consistent with available rerources, giving special attention to improving existing institutions in the fields of family and child welfare, protection and assistance. An appropriate staff using competent personnel already employed in Government would be recruited and strengthened by in-service training.

a) Collection of information on welfare activities of the nation, private and public, leading to a roster of welfare services, resources, professional skill available and required, etc.;

b) Promote meetings between organizations active in welfare activities, including sources of external aid, for the purpose of considering social welfare priorities, resources available, ongoing programs, as well as the promotion of increasingly coordinated social welfare efforts;

c) Review Government grants and subsidies to voluntary private welfare activities for the purpose of suggesting measures to increase the scope and impact of these important services;

d) Seek Government appropriate training and externally financed scholarships for qualified candidates interested in social welfare administration.

Before the end of the second year of the Plan the Social Welfare Division will make a detailed recommendation to Government for a

program adjusted to national needs and resources.

Until that time the new Social Welfare Division would operate within the budget of the Department of Education using existing personnel and available support.

III. National Youth Organization:

The Liberian National Youth Organization was established in 1962. It presently carries on an educational and physical fitness program among thousands of young people.

A. General Objectives:

The general objectives are:

1. To educate the youth of Liberia to be morally and physically ready to meet the present and future needs of the nation.

2. To function as part of the national educational system.

B. Plan Goals:

Major plan goals are:

1. To further develop the National Youth Center at Harrisburg and the specialized programs offered at the Harrisburg Camp in agriculture, carpentry, etc.

2. To extend the training activities of NYO instructors to all Monrovia schools.

3. To gradually extend the Organization's activities to other counties.

C. Development Allocation:

The detailed draft plan of the National Youth Organization calls for additional appropriations of some $50,000 annually through 1970. In view of the relative scarcity of development resources over this period it is

proposed to make a tentative allocation of $5,000 annually to the LNYO for capital investment dedicated to the support of the Harrisburg Center. Requests made by the Youth Organization for appropriations in each annual development budget will be carefully evaluated. Preference will be given to proposals supporting the general objectives of the Organization and the achievement of the nation's number one agricultural priority - national self-sufficiency in rice production.

Chapter 12

HEALTH

Better health and longer life spans clearly increase human capital. Investment for health promotion and protection constitutes an essential part of any development plan. To the extent that health activities promote an expansion of output, outlay on these services should be regarded as investment. For example, the control of malaria makes available more manpower for production, and thereby increases output.

In recognition of these facts, a Ten-Year National Health Plan (1967-1976) was prepared, with financial support from the United States and technical assistance from the World Health Organization. The Development Plan incorporates - to the extent that available resources permit - the first four years of the ten-year plan.

I. Health Facilities: The Present Situation:

Medical care is available from three sources: the Government, large private companies and religious organizations. These operate hospitals, out-patient departments and health clinics.

Hospitals: At the end of 1965, the Government operated fifteen hospitals, private companies ten, and religious missions five, with a total of 2,160 beds. In addition, there were five private nursing homes with 40 beds, making a total of 2,200 beds. Based on the estimated population of 1,016,000 the ratio of beds was 1.9 per thousand persons.

Clinics: In 1965, there were 154 health clinics, ninety-three provided by the Government, forthy-six by private companies and fifteen by missions. The ratio of clinics to population varies considerably. In Montserrado County there was one for 3,645 people, in Grand Bassa, one for 16,480 people. For the country as a whole, there was one health clinic for 7,000 people. The clinics operated by private companies and missions are well organized and well patronized. The clinics conducted by the Government are of varying standards. The best organized and staffed is the Public Health Clinic in Monrovia.

Professional Staff: There are ninety doctors practicing in the country. Of these, fourteen are Liberian Nationals. Thirty-nine doctors were working in Government services, twenty-eight at the Private Companies, including two doctors working at the Liberian Institute of Tropical Medicin eight in the missions and fifteen in private practice. Of the fourteen Liberian doctors, thirteen were in Government employment and one in private practice. The cadre of doctors in Government service was forty- six. Of these, forty-four posts were for clinical work, and two for administration. There were seven vacancies in the Government service. These posts were filled during the first half of 1965, bringing the total number of doctors in Liberia to ninety-six.

The ratio for the whole country was one doctor for 11,300 people. The ratio for the counties varied considerably from one doctor for 4,24 in Montserrado County, to one doctor for 32,882 in Bong County. In Montserrado County, there is a greater concentration of government

doctors because of the specialized nature of the medical institutions existing in Monrovia. There were fifteen private practitioners in Montserrado County; fourteen of them were in Monrovia and only one was practising outside the city, in Kakata. There were no private practitioners in the rest of the country.

In 1965, there were fifty Liberian students studying medicine on government, WHO and foreign government scholarships, and four students financed by religious missions, making a total of fifty-four students. Twenty-two were studying in Germany, thirteen in Italy, eight in the US, two in Israel, England, Switzerland, Puerto Rico, and one student each in Belgium, France and Spain. These students are due to complete their studies and graduate between 1965 and 1972. It is not known when the remaining eight are likely to graduate. The number of students studying medicine privately is not known. Allowing for wastage, and also for extension of the training period, it is estimated that forty Liberians would graduate by 1974. In 1964, there were fourteen dentists in Liberia. Ten were employed by the Government, one of whom was engaged in administration, one was employed by the concessions and one by the missions. Two were in private practice.

The Health Department had in its employment two hundred and eleven qualified nurses, eighty-eight practical nurses, and two hundred and twenty nurses-aides and dressers. The number of qualified midwives in employment was forty-six, eight of whom were nurse-midwives, and twenty-one auxiliary midwives. There were ten X-ray technicians employed by the Department.

by the Department. The Government had conducted training courses for X-ray technicians, but these are no longer held. In 1964-1965, there were no students in training.

There were six senior and thirty junior laboratory technicians and five laboratory helpers working in the Service. Of the six senior technicians, three have been trained in the U.S. where they have obtained a B.S. degree in medical technology. The other three have completed laboratory technician courses in Liberia, Switzerland and Holland. The junior technicians constitute the majority of the laboratory staff.

There are fifty-nine posts of Public Health Inspectors in the cadre, including those in the supervisory grades. In 1964, there were fifty-six in employment. Fourteen of them were engaged in urban sanitation in the Commonwealth of Monrovia. Other forty were engaged in community sanitation in other cities and the rural areas.

Preventive Medicine -- A malaria control program is carried on with WHO support. The incidence of active yaws has been reduced from 30 percent a decade ago to 0.8 percent at the beginning of the plan period. This successful compaign was carried on with the cooperation of the WHO and UNICEF.

Prior to the present Plan emphasis in health had been placed on providing central health facilities in each county, and the development of readily available rural health facilities proceeded at a slow pace. During the present plan period, in addition to the completion of the National

Medical Center and renovation of existing hospitals and clinics, increased focus will be given to preventive medicine through rural-based health units supported by a combination of government and local initiative. Administration of the national health program will be recognized and decentralized in keeping with this new focus.

II. General Objectives

The objectives in the field of health are:

a) To provide balanced and efficient health services preventive and curative, to all citizens.

b) To coordinate the efforts of all medical services, including voluntary agencies and concessions, in support of the national health program.

III. Plan Goals

The plan goals are:

a) To provide physical facilities adequate to meet the demand for curative medicine through the renovation of existing facilities and the completion of the National Medical Center.

b) To lay the groundwork for an expanded preventive medicine program, especially in the fields of malaria control and care for infants, children, expectant and nursing mothers.

c) To carry on an educational campaign designed to maximize the impact on health of such programs as the new water and sewer systems to be constructed during the plan period.

d) To enforce the labor safety and health code and to prevent industrial injuries and occupational deseases.

e) To provide for the training of medical personnel at two standards, the professional at international standard and the auxiliary at "demand requirements of the country."

f) To re-organize and strengthen the administration of the National Public Health Service.

IV. Programs

The major activities during the plan period include:

a) The John F. Kennedy Medical Center will be completed early in the plan period and will provide medical and surgical facilitiesfor treating 4,000 in-patients and 90,000 out-patients per year. In addition, it will train or retrain 90 paramedical technicians annually.

b) The Monrovia-Torin Medical School was established in 1966 with the assistance of the Vatican which provided the buildings and that of the Medical Facility of Torin which supplies the teaching staff. In the first year of the Plan some 35 students will take pre-medical training and in 1968 full medical training will begin. The school can consists of 2 years pre-med., 5 years medical and 2 years at the Medical School of Torin University.

c) Improvement of existing facilities through repair and renovation of hospitals and clinics, provision of more adequate equipment and supplies and in-service training for present manpower.

d) Strengthening of the administration of medical service through a re-organization which will include the setting up of two bureaus -- one for medical services, and the other for public health -- each headed by an Assistant Director General. In addition, a Deputy Director General for Technical Affairs will be appointed, a unit to control the procurement and distribution of medical supplies and equipment will be established and other personnel, under the re-organization necessary to provide efficient operation, will be obtained.

e) Under the preventive programs emphasis will be on the Basic Health Services project which has as its main objective the eradiction of communicable disease. This program, in essence, will consist of mass immunization and prophylactic measures, such as the National Malaria Pre-Eradication Project and the Yaws Control Project. A pilot project will start in Bong County in 1967.

f) Efforts are being made to carry out a special nation-wide preventive project of vaccination against smallpox and measles. As presently designed this program will include six teams made up from staff of the National Public Health Service, the provision of six vehicles, specialized supplies and equipment and two immunization specialists from USAID and operational support

from WHO. The activity, extending over several years, is part of a regional effort to premanently rid West Africa of measles and smallpox. Agreements for this project are under discussion.

V. Professional Manpower

At present there are some 100 physicians serving the nation's medical needs, approximately one for each 10,000 inhabitants.

Additional manpower requirements for the plan period are given in Table 12.1. Of necessity expatriate personnel will continue to be employed until Liberians can be trained. However, an attempt will be made to effect this change as rapid as possible. In this connection, there is an essential need to gear the scholarship program for those personnel to more specifically identified needs. It is hoped that by 1970, sufficient Liberian medical graduates will be available to staff the Public Health Service, although foreign specialists will still be required. Meanwhile, training of other technicians will continue at the Tubman National Institute of Medical Arts and the John F. Kennedy Memorial Hospital.

VI. Cost Estimate

The annual costs of the public health program are summarized in Table 12.2.

Table 12. 1

Requirements for Additional Professional Manpower

Specialists	1967	1968	1969	1970	Plan Total
Epidemiologist		1			1
Public Health Administrators (County Director of Health)	1	2			3
Paediatrician			1		1
Bacteriologist			1		1
Malariologist			1		1
Anaesthesiologist				1	1
Assistant Directors General	3				3
Medical Hospital Administrator				1	1
Dental Surgeon				1	1
Junior Doctors	1	1	1	1	4
Senior Staff					
Statistician			1		1
Health Educator		1			1
Senior Lab. Technician			1		1
Superintendent Public Health Inspt.		1	1	1	3
Junior Lab. Technician	1	2	1	1	5
Assistant Pharmacist	1	2	1	2	6
Microscopist			1	1	2
Special Grades					
Medical Assistants		2	4	6	12
Health Assistants			20		20
Nursing Staff					
Superintendent Public Health Nurse				1	1
Nurse Tutor				1	1
Graduates Nurses	5	1	6	6	18
Graduate Midwives	2	2	1	3	8
Practical Nurses	8	5	7	10	30
Auxiliary Midwives	5	7	6	6	24

Table 12.2

COST OF HEALTH PROGRAM

($000)

HEALTH PROJECT	Proposed Budgetary Appropriation				External Financing				Plan Total
	1967	1968	1969	1970	1967	1968	1969	1970	
J. F. Kennedy Medical Center									
Capital	450	150			3283	694			4577
Operating	47	343	640	660					1690
Monrovia-Turino Medical School									
Capital 1/									
Operating	19	101	170	263					553
Basic Health Services Project									
Capital	20	21	21	22					84
Operating	23	27	29	32					111
Renovation of Hospitals & Clinics									
Capital	17	29	59	82					187
Administration Building	-	40	25	25			225	225	540
All Other Activities	2804	3017	3308	3303					12432
TOTAL	3380	3728	4252	4387	3283	694	225	225	20174

Chapter 13

HOUSING, PUBLIC BUILDINGS AND PHYSICAL PLANNING

It is intended, during this plan period, to take the preliminary measures necessary to build up effective institutions for the implementation of housing, public building and physical planning programs. For construction, urgent special needs may be identified in private housing and public buildings. The resolution of bottlenecks in these two areas is imperative. Because of accelerated development people are moving to the cities. Adequate housing for low income families is particularly scarce. Nevertheless, there is virtually no access to credit from existing banking institutions. Such limited credit as might be available is short-term and at high interest. Even under these conditions it is estimated that an annual investment in the order of $7 million is made in private housing. This construction is largely financed out of current income.

The average citizen builds in modest stages by reducing his expenditures on consumption items, including food and semi-durables. Such laudable individual initiative can be greatly helped by sound policies and programs. These would support action in such fields as credit and finance, cost reduction including land and land development, the increase of building skills and the greater use of inexpensive local materials.

At present, the Government spends in excess of $800 thousand annually for the rental of public buildings. In many cases rented facilities

are inappropriate and detrimental to effective Government operations. There is therefore, an urgent need to evolve a long-term public building program, under reasonable financing.

I. General Objectives

The general objectives of public activity and initiative in the housing and building fields include the following:

1. To meet housing needs generated by the increasing pace of development through the encouragement of an active and efficient private building industry.

2. To aid and encourage Liberian investors and craftmen to take a more active role in the national building industry, including the local manufacture of building materials and supplies.

3. To seek to meet the need for new public facilities and substitute the costly rental of inadequate Government office facilities through a long-term construction program for Government buildings.

4. Housing projects should be economically viable. In the event of unpredictable natural disasters, however, the Government may extend loan guarantees and/or subsidy to provide emergency housing for affected citizens, as a social welfare function.

II. Plan Goals

1. The National Housing Authority (N.H.A.) will be activated, with external assistance. The activities of the N.H.A. will be based, in this plan period, on the results of a full analysis of the demand for urban housing. The Authority will place priority on identified activities destined to eliminate bottlenecks in the development of a dynamic local housing and building industry.

2. Special efforts will be made to increase the use of local materials in the construction industry, as well as to introduce new materials offering increased economy to the industry.

3. A program for the construction of public buildings will be developed and implemented. Priorities in this program will be based on identification of facilities meriting highest priority in terms of improved efficiency of Government operations.

III. Plan Program

A. National Housing Authority - To more fully exploit the contribution which housing and building can make to economic and social development, the National Housing Authority, created by the Legislature on April 7, 1960, will be activated and progressively staffed. The already substantial commitment of private and public resources to housing and building merits the support of a carefully selected and trained professional staff dedicated to the development and implementation of national housing building policy.

Housing credit, development or improvement of local building materials, and the planned acquisition of land permitting orderly and economic housing development will be among areas of priority interest. During the plan period the National Housing Authority will concentrate on measures promoting an active and profitable private housing and building industry able to meet effective demand for housing. The activation of such a national body is not a task to be underestimated. Creating such an institution, staffed by competent professionals in such varied fields as engineering, urban planning, finance, and economics is a major long-term project. First steps to be taken will include:

1. Enlist support of the United Nations Development Program and other interested sources of external aid in strengthening

the National Housing Authority. Such support would include provision of scholarships and training, and expert staff. Professional manpower is needed initially in the following fields.

a) A housing economist experienced in housing finance and the analysis of housing markets.

b) Short-term experts to consider the more detailed problems related to local building materials, craft training, etc.

2. A team of foreign and local technicians would work initially with the Bureau of Physical Planning, a joint effort supported by the Department of Public Works and the Department of Planning and Economic Affairs. The group would form the nucleus of the staff of the National Housing Authority when it is activated.

By mid-plan, based on the analysis and recommendations of the cooperating technicians, the National Housing Authority will be organized and activated to carry out priority functions. Tentative allocations have been made for the operation of this new institution as follows.

Table 13.1
NATIONAL HOUSING AUTHORITY
($000)

Description	1968	1969	1970
General Overhead	20	35	45
Technical Assistance - Cash Contribution	15	20	25
Total	35	55	70

B. Public Building Program - The objective of this program is to seek a solution to the highest priority needs for public facilities through a carefully planned public building program. Currently the Government

is paying high rents for buildings that are often inappropriate. It is intended to elaborate a long-range construction program designed to achieve savings on rental payments through financing the construction of urgently needed facilities.

Building requirements of the non-development agencies are also becoming acute. Typical areas of need include: Department of Justice - police and prison facilities; Department of National Defense - headquarters, barracks, and munitions storage facilities; Department of State - more economic and adequate buildings in foreign capitals for the diplomatic service; Department of Information and Cultural Affairs - National Cultural Center.

The orders of magnitude of the public buildings requirements of the major non-development departments of Government can be seen from the highest priority needs of two departments with very urgent needs - National Defense and Justice. Allocations for these facilities are not included in the requirements for the development program as projected in Chapter 3. Apart from presently unforeseen increases in total revenue, the resources for meeting these needs will have to come largely from a more economical use of funds presently used for rents and construction. This underscores the pressing need to develop a strategy for more economical use of existing resources.

When re-activated the National Housing Authority, with appropriate assistance from other Departments of Government will present Governme with a proposed program. Elements of this program will include among others: potential savings which can be realized through the purchase or

Table 13.2

1967 - 1976

Priority Construction Needs as determined by :

Department of National Defense

1.	Department Headquarters	$ 800,000
2.	Officer Quarters, Barracks, and Coast Guard Base	538,000
3.	Ammunition Storage Facilities	43,300
	Total	$ 1, 381, 300

Department of Justice

1.	Department Headquarters	$ 75,000
2.	Central Police Headquarters	500,000
3.	Prisons and Jails	1, 023,000
4.	County Police Headquarters and Out-Stations	1,190, 000
5.	Fire Service	198,000
	Total	$ 2,986,000

construction of public buildings as a substitute for rented facilities at home and abroad, sources of long-term financing for such a program, priorities for the selection of such construction projects. It will provide such additional information as it feels necessary to permit Government to make a policy decision on the implementation of its proposed program.

C. Physical Planning - The purpose of physical planning is to provide a basis for the most advantageous use of land and other physical resources.

At present this involves two Government organizations:

1. Physical Planning Bureau of the Department of Planning and Economic Affairs, which is concerned primarily with spatial/locational matters; and

2. Division of Planning and Programming of the Department of Public Works, which deals in the main with the various aspects of urbanization.

The general objectives of physical planning are:

1. To provide national, regional and local physical development plans providing an optimum pattern of land use for agricultural and urban purposes.

2. To provide for orderly urban growth before more costly unplanned development takes place, since it is expensive to correct adverse conditions which may occur as a result of uncoordinated development.

The current shortage of trained manpower makes it desirable to concentrate on only one aspect of physical planning; i.e., urbanization. Accordingly the preparation of national and regional physical development plans will be delayed until additional professional manpower is trained.

During the plan period emphasis will be placed on the following:

1. Implementation of a training program to strengthen the physical planning organization.

2. Support of the program to reactivate the National Housing Authority.

3. Investigation of the technical and economic feasibility of land reclamation in the Bushrod Island area, as a source of land for housing, light industry and commercial development.

The Departments of Public Works and Planning and Economic Affairs will carry on complementary programs:

1. To collect physical planning data and make it available in graphic form.

2. To conduct the preliminary analyses required in connection with reactivation of the National Housing Authority, including cooperation with housing experts and other technical staff involved in this program.

3. To conduct a study of land reclamation in the Bushrod Island area. If the study proves that the project is feasible, external assistance will be sought for its implementation.

D. Land Reclamation - Interest in the reclamation project arises from the fact that a large portion of Monrovia's environs particularly the section which is well situated for industrial development and housing is now in swamp. Reclamation of this area would make it possible to proceed with proposed programs for small scale industry and also for urban low-cost housing development. From a health standpoint, reclamation would also serve to reduce the incidence of maleria in the capital city by destroying a principal breeding ground for mosquitoes. External assistance will be sought in making a preliminary study of the technical and economic feasibility of reclaiming this area. If the result of this study is favorable, a physical plan for development of the area will be prepared and a full feasibility study made to support a request for external financing.

Chapter 14

TOURISM

The high level of investment in roads and communications achieved in recent years, opens the possibility of a new development opportunity in the next decade, namely the encouragement of tourism. The efficient use of scarce resources requires that Liberia carefully evaluate its cultural and natural attractions in the design of a tourism program.

For any nation, the contribution tourism can make to development in terms of foreign exchange earnings depends on the natural, historical, and cultural attractions a country offers, and on the amount of investment which it is prepared to make for the encouragement of tourism. Equally significant but less immediately obvious are the multiplier effects of the development of service industries which come into being partly as a result of services demanded by the tourist.

As a guide to public policy and a framework within which to build, the Committee on the Development of Tourism offers a program consistent with public resources available during the Plan. The development of tourism in Liberia was considered from both a long and short range view. In this connection, the Committee recommends measures of a short range nature that can be immediately implemented without major expenditure. The following proposals in no way substitute for the long range planning programs necessary to derive the maximum benefits from a well developed tourist program.

I. Facilitating Tourist Visits

1. Tourism Visa

Tourist visas valid for two weeks should be obtainable upon arrival at port of entry or routinely issued at Liberian Embassies and/or Consulates all over the world.

2. Exit Permits

The need for exit permits for persons holding valid tourist visas should be eliminated or routinely issued at ports of exit.

3. Immigration Staff

The Immigration Staff should be informed that it is a policy to treat the tourist as a welcome guest and in a friendly cooperative manner.

4. Customs

Baggage inspection should consist of spot checks of baggage.

5. Duty Free Shop

The Duty Free Shop at Roberts International Airport should be enlarged. Standards for its operation should be set and maintained. Liberian and West African art and handicrafts should be available at reasonable prices.

The Duty Free Shop should have exclusive rights for the sake of native artifacts. Independent traders should be barred from selling on the premises of the airport.

6. Money Exchange

Facilities for money exchange should be established at ports of entry/exit.

7. Telephone Link

A telephone link between Roberts International Airport and Monrovia should be established.

8. Tourist Courtesy Card

Tourists should be issued a courtesy card. The possibility of discounts being granted to holders of these cards in hotels, restaurants, bars, etc. should be carefully studied. (Other countries such as France and Italy are known to offer special rebates and/or prices, on specific items to tourists or people paying with travellers cheques). Officials, police, businessmen, etc., should be requested to grant all possible extra courtesies to holders of these cards.

Tourists courtesy cards should have a maximum validity of two weeks clearly marked on the card. Various clubs in the area should be encouraged to permit tourists to use their facilities at a nominal fee. (Ducor Club, North Beach Recreation Club, VOA and Firestone Clubs, etc.). These cards should be issued by the Tourist Bureau of the Department of Information and Cultural Affairs.

9. Driving Licenses

Valid driver's licenses from other countries should be declared valid for temporary use of tourists in Liberia.

II. Domestic Transport within Liberia

1. A scheduled airport limousine service should be established and maintained. Roberts International Airport should be charged with obtaining detailed and competitive bids from Liberian transportation companies. A contract should be signed with one company by Roberts International Airport to meet all flights. Airlines serving Roberts International should be directed to list these services in their schedules.

   Taxi service should not be restricted to any particular company but fixed fares should be determined and charged.

2. Insured taxi cabs should be directed to publish and charge fixed rates for specific itineraries within Liberia and these should be enforced by an appropriate Government agency.

3. Bus companies should be directed to establish service to specific points outside Monrovia (e.g. Totota, Firestone, Buchanan etc.). Fares should be published and maintained. A special committee of bus operators should make detailed recommendations for implementation of this proposal.

4. The possibility of tourist traffic on the mine trains should be explored and developed to enable tourist groups to visit mining operations for sightseeing.

5. Air Taxi companies should establish low fare air taxi services between Monrovia and Roberts Field as well as to and from other points of interest in the country. (e.g. Robertsport, Cape Palmas, Nimba etc.).

III. Publicity and Promotion

In the early stages of development the tourism promotion will heavily depend on increasing effective cooperation with major international carriers, particularly airlines and steamships, that provide regular service to Liberia. They would cooperate in the preparation and distribution of promotional materials. As in the case of successful promotional activities on behalf of tourism elsewhere it is basic to analyze the potential market and tailor cooperative efforts to a specific market. The unique relationship of Liberia to the United States suggests that this is one of tourist trade meriting special attention. Further:

1. A tourist board should be established as a permanent body and expert advice sought through external assistance to direct its efforts. This board would function within the Department of Information and Cultural Affairs.

2. An attractive folder on Liberia should be produced, for distribution through selected embassies and consulates, airlines and travel agencies. This folder should contain general information on Liberia, pictures, maps, hints on climate, health, currency, facilities, places of interest etc. and be republished at least yearly, in order to remain up-to-date. Part of the production cost could be covered by advertisements.

3. Liberian Embassies and Consulates should be instructed to increase their activities in promoting tourism to Liberia by the distribution of this folder, by showing films and also by expeditious handling of inquiries, visa requests etc.

4. Films made by the Department of Information: Film Contractors should be copied and made available to embassies, travel organizations and airlines, for showing to potential tourist groups.

IV. Places of Interest

1. A description of all places of natural, cultural or historic interest should be drawn up including lesser known spots in the hinterland. Such lists should be made available to airlines and travel organizations.

2. Concessions, plantations, mines, agricultural or botanical research projects etc. should be opened to visits by tourists.

3. To the fullest extent possible, Government buildings should be open to visits by tourists, including the Executive Mansion, the Capitol, the Temple of Justice etc.

4. The facilities at selected beaches should be improved.

5. The Cultural Center should be operated and promoted as a place of interest, with publicized demonstrations and shows of Liberian folklore.

6. Local travel organizations should prepare tours to places of interest and train personnel to accompany such tours.

V. Long Range Plan

The Department of Information and Cultural Affairs, working through the Tourist Board, will provide leadership in the evolution of a long-range national tourism program. It is proposed that a number of measures be given closer study, e.g. sources of external finance and assistance in the shaping and implementation of tourism projects, special

incentives to Liberians interested in establishing required facilities such as hotels and guest-houses outside Monrovia.

The Committee on the Development of Tourism, which includes representatives of Government, commercial carriers and services which cater to visitors, will continue its exploratory activities making special recommendations to Government for tourism development.

These studies and recommendations should include:

1. A detailed plan for the establishment of more facilities, such as motels, recreation areas and restaurants.

2. A program for the organization of arts and crafts of sufficient quantity and quality to meet tourist needs.

3. Establishment of attractive markets where tourists can buy local craft items. Experience has shown that the open air market with a few covered stalls appeals to tourists.

4. Organization of permanent folklore troupes for cultural presentations as tourist attractions; and

5. For the long-run program:

   a) The creation of a game park in our most attractive national forest reserve. This will require training game wardens to organize and supervise the park. Game parks in Africa are usually a major tourists attraction.

   b) The encouragement of the private sector to build a chain of motels or tourist villages throughout the country where tourists can find clean and comfortable accommodation

   c) The development of motorable trails to attractive beaches along the coast.

Chapter 15

STATISTICS

The basis of sound decision making is knowledge, and the basis of knowledge is organized reliable data. Statistics are a basic tool for the direction of national development activity. In the absence of reliable data on the past and the present, policy cannot be judged objectively.

The reorganization and development of statistical activities, and measures to be taken to make that development possible are outlined in this Plan.

A basic concern is to expand the body of statistics available to the nation gradually and systematically, guarding against the difficulty that has been experienced from time to time, namely the spreading of scarce resources over too many new projects. A number of measures proposed are aimed at ensuring that statistical data already being gathered are accurate and made available in time to be useful. It is necessary and essential to spell out a basic program for the development of statistical work.

I. General Objectives

A development program for statistics, aiming at a comprehensive, integrated record of resources and activities, is proposed in the following areas:

A. National Accounts

B. Economic and Financial Indicators

1. Capital Formation
2. External Trade
3. Balance of Payments
4. Public Finance
5. Banking
6. Financial Flows and Balances
7. Prices

C. Social and Manpower Statistics

1. Population
2. Vital Statistics
3. International Migration
4. Employment and Conditions of work
5. Education
6. Health
7. Housing
8. Con sumption and Expenditures of Households

D. Production

1. Agriculture, Forestry and Fishing
2. Mining and Quarrying
3. Manufacturing
4. Construction
5. Electricity , Water
6. Transportation

E. Commerce

1. Wholesale Trade
2. Retail Trade
3. Services

These categories, which are considered basic areas for the development of comprehensive and coordinated statistics, provide a broad long-term framework within which existing statistical series will be strengthened and new series established.

II. Plan Projects and Activities

During the plan period emphasis will be concentrated on the following:

a) National Income Accounts - During this plan period a set of national income accounts will be developed and the procedures established for producing these accounts on a continuing basis annually. These accounts will measure the total value of goods and services produced within Liberia (the gross domestic product), the portion of that value accruing as income to Liberian citizens and organizations (the gross national product) and the portion paid abroad. In addition the accounts will contain a sector breakdown showing the contribution to national output by major sectors, such as agriculture, mining, industry, etc., and also a breakdown of income payments as between salary and wages, rent, interest, etc. The figure for total product will give us our best single measure of the progress we are making in economic development. Year to year changes in this figure realized will thus furnish Government with a guide to the necessity of considering policy changes. The breakdown as between sectors and types of income will furnish further guidance to the Government on a number of policy and strategy decisions it will have to consider from time to time. To test the feasibility of such estimates in the present state of Liberia's statistical development, the Department of Planning and Economic Affffairs has conducted two trial runs which produced national account estimates

for the year 1964 and the sector account for the Government sector for the years 1964 and 1965. The results of these trials proved the feasibility of establishing these estimates as part of our permanent statistical work.

b) Money and Banking Statistics - The functioning of the banking system, developments in the monetary situation, and changes in the money supply are important determinants in the performance of any economy and, as such, must be taken into consideration in the determination of a government's economic policy. Since Liberia does not maintain a central bank and does not issue national currency, statistical information that normally arises in these two connections is not available to the government for its guidance. To remedy this gap in our statistical information, a system of regular reporting by all banking institutions operating in Liberia will be established, supplying the Government with the basic information it requires to be continuously appraised of developments in this key field. Initially it is intended to secure reports from the banks on a quarterly basis; subsequently the usefulness and feasibility of reporting on a monthly basis will be considered.

c) Economic Indicators - To provide a current measures of developments in key aspects of economic activity such as employment, wages

annually of firms in the private sector. In order to reduce any unnecessary demands on the cooperation of private firms, every effort will be made to consolidate in this annual survey several of the questionnaires not being sent to private firms by various agencies of the Government. The normal statistical practice of publishing the results of this survey on a consolidated basis only will be followed so as to protect the confidentiality of data supplied by individual firms.

d) Agricultural Survey - Two related projects will be carried out: an agricultural survey in two counties, Bong and Grand Bassa, and the collection of prices to be carried out monthly in ten centers of agricultural production.

The agricultural survey, part of a pilot test for a proposed agricultural census in the next plan period, will collect the following information: agricultural population and farm households, land tenure and use, area cultivated and production by crop, livestock and poultry, marketing facilities etc.

e) Household Survey - This survey will be carried out on a continuous basis. The sample will be selected from a frame based upon the results of the last population census. It is proposed to make one survey in the first year which will provide the basis for future surveys, improvement in procedures and field testing of questionnaires and processing procedures. The subjects to be

included in this program include: demographic characteristics, health conditions, employment, housing conditions and facilities, education consumption patterns including diet and nutrition. This range of topics will not be investigated at one time. Selected items will be investigated in each succeeding survey. The information collected will provide a measure of current economic and social conditions and, over time, a measure of the changes occurring in these conditions.

f) Wholesale Price Index - In addition to the Consumer Price Index now published, the Bureau of Statistics proposes to construct an index reflecting price changes at the wholesale level. This index will initially be published quarterly.

g) Coordination at the County Level - In 1967 a County Statistical Officer will be assigned to Bong County in the Office of the County Superintendent as a pilot scheme. Among other duties he will coordinate all field work of a statistical nature in the county. If this scheme proves successful, other officers will be assigned progressively to the other counties. These officers will be members of the permanent staff of the Bureau of Statistics.

h) Coordination Between the Bureau of Statistics and the Data Collecting Agencies of Government

The Bureau of Statistics of the Department of Planning and Economic Affairs is the agency in which all statistical activities of Government are centralized. The official statistics of the

Government are published by this Bureau. To effectively perform its function, it is necessary for the Bureau to obtain regular and reliable data from private and governmental sources. To this end it is proposed that arrangements be made to increase the regular periodic flow of data. Agencies of Government will be encouraged to establish data collecting units, and the Bureau of Statistics will provide tehnical assistance in this process. Emphasis will be given to improved coordination between the Bureau and the data collecting units of the Department of Commerce and Industry, Justice, Treasury, Education, the Bureau of Labor Affairs and the National Public Health Services.

i) Machine Processing of Data - The present system is a series of single purpose punched card accounting machines which take single units of information and by successive passes through the various machines assemble a final report. The processing here is in terms of cards per minute and a single step at a time. It is proposed to acquire an IBM computer No. 360 Model 20 which incorporates all aspects of the punched card processing: card reading, punching, reproducing, collating, gang punching, interpreting, printing and summary punching. It includes the basic function of adding, subtracting, multiplying and dividing. Certain logical decisions can be made and acted upon as the situation requires. It accomplishes these functions at speeds up to thousandths

of a second, reducing the critical period between the start of a job and the availability of usable results as well as the absorbing of greater volumes of work and making possible more applications.

This unit will permit the elimination of four of the units in the current IBM installation. The proposed system costs approximately $2,400 per month. The equipment presently in use, which it is proposed to eliminate costs (tab machine, calculator, reproducing punch, and the collator) $1,900.

It is proposed that this equipment be acquired in 1969. A detailed training program is now being prepared.

After careful study, it is recommended that the Department of Planning and Economic Affairs acquire an offset printing machine using paper masters. The paper plates can be made either by typewriter, handwritten (using multilith pencil) or on the tab machine. It is more durable than a stencil, particularly if drawings, graphs and charts must be made. Anticipated increases in the present work load include:

1. A monthly report on Foreign Trade showing the imports and exports for the current month and import and export figures for the year to date.

2. An Expenditure and Encumbrance Report for each month for the Treasury Department as well as the monthly Revenue Report.

III. Cost of Program

The major part of the Plan Program outlined above will not require significant increases in expenditure during the Plan. The following projects however must be provided for:

	1967	1968	1969	1970
		($000)		
Agricultural Survey*	10	40	40	40
Computer Rental**	-	2	6	6
Offset Printing Machine			-	-
Total	10	42	46	46

*The field staff of the Agricultural Survey will carry out the Household Survey during the rainy season when agricultural areas are inaccessible.

** This is the net additional rental above the charges now paid for the equipment that will be eliminated by the new computer.

Chapter 16

MANPOWER

A primarily determining factor of orderly economic growth is the availability of manpower able to perform the increasingly complex tasks required for accelerated development.

The following summarizes available manpower information and proposes research activities designed to increase such information and to provide a basis for recommendations on identified manpower problems.

I. The Manpower Commission

The relative importance attached to the role of manpower planning and development by the Government is reflected in the creation in 1966 of Manpower Commission as a subsidiary body of the National Planning Council. The Commission consists of representatives from the following agencies and institutions:

The Department of Education, Chairman
The Department of State
The Department of Defense
The Department of the Treasury
The Department of Agriculture
The Dep artment of Planning & Economic Affairs
The Department of Commerce & Industry
The Department of Internal Affairs
The University of Liberia
The Civil Service Commission
Labour & Management

The Commission is served by a Secretariat provided by the Department of Planning and Economic Affairs.

II. General Manpower Objectives

The general objective during the plan period is the formulation by the Manpower Commission of manpower policy within the framework of overall economic and social development with respect to the following basic elements:

a) Population Policy

b) Employment Objectives of the Development Plan

c) Education Policy

d) Manpower Training Policy.

To facilitate the formulation of such policies, the Secretariat will assemble and analyze the following data:

For the population study - The population growth in terms of birth rate, death rate and migration; the geographic distribution of the population in urban and rural areas; housing and physical planning information.

Employment objectives of the Development Plan - The draft Development Plan and the sectorial plans with the targets of production and employment required to reach the target. The information on manpower will be furnished by the Bureau of Labour and the information on production by the Department of Agriculture and the Department of Commerce and Industry. A Labour Force survey will be conducted for 1969-1970.

Education Policy - The illiterate population by age, sex and location; the number of schools by size of enrollment and location and by level of education; the statistics of vocational and technical education; the educational level of the labour force; and the educational expenditure in the past five years. The foregoing information will be furnished by the Department of Education.

Manpower Training Policy - Data on the existing training facilities and on in-service training conducted by the various enterprises and concessions will be assessed by the Secretariat.

III. Program

The program of the Manpower Commission is as follows:

A. Prepare a projection of the population to 1970;

B. Study and analyze enrollment and graduates by grades;

C. Make a study and analysis of teachers, the grades they teach and their qualifications;

D. Study and analyze expenditures on education in terms of unit cost per pupil;

E. Study the scholarship program;

F. Analyze the 1966 employment survey of the Bureau of Statistics;

G. Keep the evolving manpower requirements of the economy under continuous review.

IV. Basic Data

The basic source of manpower data is the Population Census of 1962. In April 1962, the total population of the country was 1,016,443 of whom 503,588 or 49.5% were males and 512,855 or 50.5% were females. Of the total population 75 percent lived in four of the then twelve political subdivisions: 32 percent in Central Province, 16.8 per cent in Western Province, 16.4 percent in Montserrado County and 9.8 percent in Bassa County. Table 16.1 shows this distribution for the whole country.

With respect to age distribution, about 16 percent were under five years of age and about 29 percent were between five and twenty. This distribution of the population by sex and age is shown in Table 16.2.

Based on the data from the 1962 population census which showed an economically active population of 40.5 percent and an estimated natural growth of 1.6 percent, it appears that about 7,000 persons a year enter the working force. To those seeking employment as new entrants to the labor force must be added the backlog of unemployed.

Table 16.1

TOTAL POPULATION BY SEX AND POLITICAL SUB-DIVISION, 1962

(000)

Sub-Division	Both Sexes		Male		Female	
	Number	%	Number	%	Number	%
All Liberia	1,016:4	100.0	503:6	100.0	512.9	100.0
Central Province	325.2	32.0	159.7	31.5	166.5	32.5
Western Province	170.9	16.8	79.4	15.7	91.6	17.9
Montserrado	166.8	16.4	96.1	19.1	70.7	13.8
Grand Bassa	99.6	9.8	48.2	9.6	51.4	10.0
Eastern Province	63.7	6.3	28.0	5.6	35.7	7.0
Sinoe	44.6	4.4	21.6	4.3	23.0	4.5
Maryland	39.3	3.9	20.1	4.0	19.3	3.7
Cape Mount	32.2	3.2	16.2	3.2	16.0	3.1
Rivercess Territory	28.8	2.8	13.4	2.7	15.3	3.0
Kru Coast Territory	21.3	2.1	9.7	1.9	11.6	2.2
Marshall Territory	14.4	1.4	7.7	1.5	6.8	1.3
Sasstown Territory	9.5	0.9	4.5	0.9	5.1	1.0

Labour participation rates of the countries of Gabon, Ghana, Morocco and Tunisia along with the computed rates for Liberia are given in Table 16.3. Due to differences in defining "working population", data are not strictly comparable between Liberia and other countries. Therefore, it would be appropriate to compare the total labor participation rate[1]/.

1/ $\left(\frac{\text{Working population}}{\text{Total population}} \times 100\right)$

Table 16.2

POPULATION BY SEX AND AGE, 1962

Age Group	Total	%	Males	%	Females	%
All Ages	1,016,433	100.0	503,588	100.0	512,855	100.0
Under 5	165,382	16.3	81,625	16.2	83,757	16.3
5 - 9	133,762	13.2	68,809	13.7	64,953	22.7
10 - 14	78,595	7.7	43,483	8.6	35,112	6.9
15 - 19	83,297	8.2	39,248	7.8	44,049	8.6
20 - 24	84,358	8.3	34,757	6.9	40,601	9.7
25 - 29	95,292	8.4	40,220	8.0	55,072	10.7
30 - 34	81,991	8.1	36,750	7.3	45,241	8.8
35 - 39	69,438	6.8	34,459	6.8	34,979	6.8
40 - 44	58,611	5.8	31,367	6.2	27,244	5.3
45 - 49	44,262	4.4	24,715	4.9	19, 547	3.8
50 - 54	34,293	3.4	19,746	3.9	14,547	2.8
55 - 59	22,777	2.3	13,296	2.6	9,481	1.9
60 - 64	23,881	2.4	13,130	2.6	10,751	2.1
65 - 69	16,106	1.9	8,808	1.8	7,298	1.4
70 - 74	9,221	0.9	4,363	1.0	4,358	0.9
75 and over	15,077	1.5	8,212	1.5	6,865	1.3

Table 16.3

LABOR PARTICIPATION RATES OF LIBERIA AND OTHER DEVELOPING AFRICAN COUNTRIES

Country	Year	Male			Female		
		15-19	20-64	65+	15-19	20-64	65+
Gabon	1963	66.7	69.9	16.7	35.7	55.6	20.0
Ghana	1960	61.0	95.5	71.3	53.3	58.2	42.6
Liberia	1962	46.5	89.1	64.3	34.9	45.8	20.4
Marocco	1960	61.1	93.4	66.7	9.9	8.8	6.4
Tunisia	1966	67.1	94.9	77.4	36.4	37.3	11.3

for any other country with that of Liberia. However, it would be throughtprovoking to compare these rates for certain age groups for which perhaps definitional problems would not seriously invalidate the comparison.

Males in the age group 20-64 provide the best comparison. Excluding Gabon, Liberia had the lowest labor participation rate for males in the age group 20-64. One reason for this smaller percentage is later entry into the labor force by Liberians. Liberia has a substantially lower labor participation rate in the age group 15-19 compared to other countries. It may be concluded therefore that Liberians start work at a later age than the population of some of the other developing African countries.

Table 16.4 gives the total and the economically active population figures and labor participation rate for various areas of the country.

Table 16.4

ECONOMICALLY ACTIVE POPULATION AND LABOR PARTICIPATION RATES BY AREA, 1962

	Total Population			Economically Active Population			Labor Participation Rates		
	Both Sexes	Males	Femeles	Both Sexes	Males	Females	Both Sexes	Males	Females
All Areas	1,016,000	503,588	512,855	411,794	263,560	148,234	40.5	52.3	28.9
Monrovia City	80,992	47,191	33,801	26,825	23,650	3,175	33.1	50.1	9.4
Buchanan City	11,909	6,795	3,114	3,566	3,293	273	29.9	48.5	5.3
Harbel City	31,730	19,026	12,704	13,638	13,407	231	43.0	70.5	1.8
Maryland County	39,349	20,081	19,268	14,442	9,457	4,985	36.7	47.1	25.9
Cape Mount County	32,190	16,163	16,027	13,443	8,677	4,766	41.8	53.7	29.7
Montserrado County Excl. Monrovia, and Harbel	54,075	29,839	24,236	19,229	15,847	3,382	35.6	53.1	14.0
Grand Bassa County Excl. Buchanan	87,657	41,402	46,255	37,884	21,955	15,929	43.2	53.0	34.4
Sinoe County	44,639	21,610	23,029	17,209	8,994	8,215	38.6	41.6	35.7
Central Province	325,230	158,748	166,482	142,516	85,268	57,248	43.8	53.7	34.4
Western Province	170,942	79,398	91,584	62,726	42,582	20,144	36.7	53.7	22.0
Eastern Province	63,712	28,025	35,687	32,611	13,889	18,722	51.2	49.6	52.0
Marshall Territory	14,442	7,675	76,767	5,178	4,403	775	35.9	57.4	11.5
Rivercess Territory	28,756	13,448	15,308	9,803	6,052	3,751	34.0	45.0	24.5
Kru Coast Territory	21,280	9,751	11,529	10,449	4,421	6,028	49.1	45.3	52.3

In planning for economic development it is quite necessary to have some knowledge of the existing industrial activities of a country and the manpower resources devoted to these activities. The percent distribution of the working population by industry and type of employment for Liberia and Ghana is shown in Tables 16.5 and 16.6.

Table 16.5

PERCENT DISTRIBUTION OF WORKING POPULATION (BOTH SEXES) IN GHANA AND LIBERIA BY MAJOR INDUSTRIES, 1962

Major Industries	Total	
		Ghana
All Industries	100.0	100.0
Agriculture, Forestry, Hunting and Fishing	80.9	61.6
Mining and Quarrying	3.5	1.9
Manufacturing	2.1	9.2
Construction	2.9	3.5
Electricity, Gas, Water and Sanitary Services	1/	0.5
Commerce	2.8	14.5
Transportation, Storage and Communication	0.9	2.7
Services	6.0	6.1
Activities not adequately described	0.8	-

1/ Less than 0.1 percent.

Table 16.6

PERCENT DISTRIBUTION OF THE ECONOMICALLY ACTIVE POPULATION, LIBERIA AND GHANA, BY OCCUPATION

Occupational Group	Percent of Economically Active Population	
	Liberia	Ghana*
All Occupations	100.0	100.0
Professional, etc.	1.8	2.3
Administrative, Executive, Managerial Workers	0.5	0.5
Clerical workers	1.1	1.7
Sales Workers	2.7	13.5
Farmers, Fisherman, etc.	78.7	61.0
Miners, Quarrymen, etc.	1.7	1.3
Workers in Transport and Communications	1.5	2.0
Craftmen and Production process workers workers	8.3	15.5
Service, Sports and Recreation workers	1.9	2.1

x Year book of Labour Statistics I.L.O., 1964

Chapter 17

PUBLIC ADMINISTRATION

The successful implementation of development programs and the effective day-to-day operations of the agencies of Government are dependent upon administrative competency.

I. General Objectives

The general objectives are as follows:

Personnel Management

A strengthened civil service system by which the Government can realize benefits inherent in a merit system of personnel management and by which a career service is promoted and developed.

Fiscal Management

Refinement and improvements in existing government accounting to assure financial and accounting data of the kind essential for agency planning and program budgeting.

Administrative Management

To implement recorganization recommendations endorsed by the President's Reorganization Committee.

II. Plan Goals

A. Personnel Management

a) To obtain a new and strengthened Civil Service Act, based on merit principles, for the administration of the Civil Service.

b) To develop a trained staff competent to administer and maintain a central agency for personnel administration under a merit system.

c) To institute position classification for Government personnel and personnel rules and regulations to assist in the administration of merit policies.

d) To establish central personnel records and assess individual records in relation to minimum job requirements.

e) To conduct qualifying examinations where necessary and to establish a registry of all personnel currently meeting minimum job specification requirements.

f) To adopt and progressively implement the proposed Personnel Pay Plan.

B. Fiscal Management

a) To establish within departments and agencies of Government departmental accounting capability and operations patterned on the pilot system developed by the Special Commission on Government Operations for the Department of Justice.

b) To develop accounting data on departmental levels permitting the measurement of program operations and the ultimate introduction of program budgets.

C. Administrative Management

a) To implement the General Service Agency Act's procurement and supply function within the plan period to the extent of establishing centralized purchasing and supply.

b) To implement the general Service Agency Act's Bureau of Housing and Public Property to manage all Government-owned and leased lands and buildings, and administer standard policies related thereto, which are consistent with the policies of the Government building program discussed in the Chapter on Housing, Public Buildings and Physical Planning.

c) To implement centralized control over vehicle servicing and to prescribe standards of vehicle and equipment use, care, and maintenance.

III. Programs

To attain the Plan's goals outlined above, a logical course of proceedings and order of projects to be undertaken are necessary in each of the

three general objectives areas. The proposed programs are as follows:

A. Personnel Administration

a) To institute a Personnel Classification and Pay Plan which would be based on a merit system for personnel administration.

b) Implementation of the program would provide for appointments, promotions, transfers, removals, discipline, training and welfare services of government employees. Appointments to civil service positions would be made on the basis of qualifications and merit.

c) The proposed Personnel Act submitted by the Special Commission on Government Operations entitled "Bureau of Personnel Act" should be considered and adopted as the first step in developing an improved personnel management.

d) In order for the new Bureau of Personnel to be viable, it is essential to have a trained and competent staff. Since new disciplines will be required, as compared to existing operation, it will be necessary to arrange for a training program for personnel technicians.

This training would be in such special disciplines as job classification, pay plan preparation, personnel testing, and personnel records. In addition to academic training in these disciplines, which should cover approximately six months, it is also desirable that the participants receive on-the-job training experience with an operating civil service agency board.

Other in-service training would be provided Liberian personnel in such subject areas as recruitment methods and techniques, interviewing, and personnel investigation.

e) The third step in improving personnel management would be the adoption and installation of a Personnel Classification Plan and the Personnel Rules and Regulations based upon the Government's review of proposals in these areas. Both policies should be adopted early in the 1968 Legislative session to allow ample lead time for using the classification in 1969 budget preparation and for changing over payrolls to reflect the new position titles.

f) Action will also be taken within the plan period to adopt the proposed Pay Plan recommended by the Special Commission on Government Operations.

Implementation of the pay plan must be approached gradually reducing annual costs by several methods or combinations of methods as follows:

1) Apply the new pay plan rates only to new employees who meet the minimum job requirements.

2) Extend the new rates to include those mentioned above and those currently employed who meet minimum job requirements.

3) In addition to a) and b) above, arbitrarily apply the new pay rates to classes, such as the top ranges, who would be giving up a number of fringe benefits as previously referred to in this section.

Other methods that could be applied to the pay plan implementation which would reduce its financial impact include the following:

1) The percentage in the step increases could be reduced by the introduction of half steps. This would reduce the amount of increase between steps. Thus the total impact of the pay plan could be spread over a longer period at lower annual cost.

2) The breath of each range could be reduced.

3) A relatively small saving could be realized in applying the new pay scales if position whose current rate would fall between the minimum and maximum amounts were set at the nearest step rather than at the next higher step above the current rate, as proposed in the pay plan.

4) Priorities could be assigned to certain departments and agencies in order of apparent need. The amount of funds available for pay plan implementation in the coming fiscal year would be applied to the departments and agencies designated in the top priority and proceeding downward ea h successive year.

B. Fiscal Management

At present there is a far from adequate capability in the departments and agencies to program activities. From the point of view of the development program the most serious manifestation of this is the inability of agencies to design projects and programs that will meet their top priority objectives, properly costed, analyzed, and programmed in terms of the sequence of actions that are to be taken. Associated with remedying this would be the necessity to develop information feedbacks on performance and to adjust department programs in the light of these feedbacks.

Achievement of the plan goals in fiscal management requires the following action:

a) Departments of Government which are already partially program structured, such as Education, Agriculture, Health and Public Works, should be the first to establish departmental accounting systems similar to the pilot project now installed in the Department of Justice.

The accountint information and data thus made available to the department heads will provide a tool for planning activities, while permitting the breakout of operations by program. This will permit a transition from departmental accounting to program budgeting. Through such accounting data, planning can become more meaningful, problems can be identified, resources ascertained, and priorities established. The work to be performed by the departments is thus identifiable in program budgets.

The development of departmental accounting capability should be programmed for the departments refered to above during 1968-1969. Development of program budgeting would follow.

b) As program budgets are broken out from the accounting data, those activities which become identifiable as not in harmony with the other programs of the department can be transferred to create greater unity within the department, while placing the operation where it will function most harmoniously. This latter phase of progress budgeting will be implemented in the 1969 and 1970 budget years.

C. Administrative Management

The specific programs recommended for implementation in the plan period for improved administrative management of particular aspects of the Government's operations are as follows:

a) A two-stage program in the plan period for improvement in the procurement and supply functions of the Government. In the first stage, to be initiated in 1967, there would be established centralized purchasing through the Bureau of General Supplies, with warehousing and supply of the most common items. New purchasing manuals would be prepared and distributed to all departments and agencies of Government to facilitate the new operation.

Training of existing personnel in new procedures would be conducted on the job prior to institution of centralized purchasing and would continue during 1968. Participant training would be negotiated for at least two candidates in the more technical aspects of central purchasing between 1968-1969 in the light of phasing out existing advisory services.

The second phase of central purchasing would include the development of standardization in the purchasing of number of items which are common throughout the Government and by which substantial savings could be realized; for example vehicles, typewriters, and other items of office equipment and furnishings.

b) Implementation of the provision of the General Services Agency Act providing for the creation of a Bureau of Housing and Public Property. Because of the sizeable savings that are anticipated through a central housing bureau operating under improved control policies, the Bureau should be made operational by mid-1968.

Ultimately, the Bureau of Housing and Public Property would become one of the four bureaus provided for within a Central Services Agency. Adoption of standard housing policies would provide immediate improvement in the management of Government housing and would permit the creation of basic records and controls to permit evaluation of individual assignments and leases.

c) Establishments of a central Division of Mobile Equipment and Vehicle Management. This would be a partial implementation of the Bureau of Mobile Equipment and Vehicles as provided for in the Central Services Agency Act. Because of the resources required, complete implementation is not possible in the plan period, whereas partial implementation does seem practical as follows:

1) One of interim basis, it is proposed to create a Division of Motor Equipment and Vehicles within the Bureau of General Supplies. It would be the function of this Division to provide selective servicing of motor equipment and vehicles. The operation and management of service station facilities would be under the supervision of this Division. It would establish procedures relative to vehicle use, care, and servicing. By procuring petroleum products in bulk quantities and dispensing them through Government stations, considerable savings could be realized, as well as reductions in budgetary requirements for vehicle operating costs.

2) A second aspect of the program would be the creation within each department of a system for improved equipment management. This element would be a part of the basic departmental accounting system proposed for improved fiscal management. Initially, central servicing would be provided to Department of Public Works vehicles and equipment through existing facilities within the Monrovia Public Works compound. This would produce improved central and more economical purchasing of petroleum products for the largest departmental consumers.

To staff the Division it is recommended that technical assistance (probably in OPEX-type personnel) be obtained and participant training be provided in order to ensure continuous efficient management and early phasing out of the technical personnel.

Chapter 18

PLAN IMPLEMENTATION

The Plan should be considered as the general framework within which Government is to operate during the next four years. The maintenance of Plan discipline in the formulation of the National Budget and in the consideration of economic policy during the Plan Period does not, of course, mean that Government is left without flexibility in the decision-making process. To view the implications of the Plan in this way would be highly unrealistic.

Dealing as it does with four years extending into the future, the Plan has inherently implicit in it a significant degree of uncertainty. Market and price conditions will certainly diverge from those assumed in the Plan; some of the projects and programs in the Plan are specifically identified as pilot in nature - that is, experimental - and it cannot be predicated at this time whether the outcome of these experiments will be positive or negative. New opportunities, unforeseen at present, will undoubtedly arise. Thus the application of the Plan will be kept under constant evaluation and review, with necessary adjustments of modifications being made from time to time in accordance with the following procedures:

I, <u>The National Development Plan and the Budget Process</u>

- In order to implement the Plan:

a) The Bureau of the Budget, in consultation with the Department of Planning and Economic Affairs, will give priority in the allocation of resources to programs and projects specified in the National Development Plan.

b) The Development Budget will specify annual appropriations and suggested quarterly allotments meeting requirements for efficient implemenation of development programs, projects and activities included in the National Development Plan. These appropriations will be incorporated within the Annual Budget.

c) New development programs, projects or activities, i.e., those not specified in the National Development Plan, must have the approval of the National Planning Council before submission to the Bureau of the Budget for consideration. The National Planning Council, at its discretion, will inform the Budget Bureau of the priority of its recommendation: Top Priority, i.e., recommended for incorporation into the annual budget, or High Priority, i.e., to be budgeted when resources become available.

d) The Bureau of the Budget will consult with the Department of Planning and Economic Affairs before authorizing budgetary transfers affecting programs, projects or activities in the Development Budget.

e) A Committee, composed of representatives of the Department of the Treasury, Department of Planning and Economic Affairs, and the Bureau of the Budget and SCOGO, will make periodic reports to the President analyzing the relative trends in expenditure on development programs, projects and activities as well as other Government expenditures. These reports will, among other things, summarize progress noted in plan implementation and in expenditure control required to ensure maximum development.

II. Program and Performance Budgeting

It is the long term objective of Government to adopt program and performance budgeting. The annual Development Budget, which identifies development programs, projects and activities within the annual budget and the related review and reporting procedures specified in Executive

Order No. 7, 1965, are first steps in the introduction program and performance budgeting. In the Plan special emphasis will be given to the continued development and extension of this type of budget in those areas which most easily lend themselves to program-type budgeting e.g., road construction and the national rice program.

III. Plan Revision

The success with which a plan is able to anticipate future conditions and spell out appropriate policy and action, taken these conditions into account, is a function of the length of the Plan Period. The trend in the developing world to elect shorter plan periods is a recognition of the inherent limitations of long-range economic forecasts. This difficulty is compounded by the influence of external economic forces - e.g., international prices, technological change, and fluctuation in the level of international economic activity - on the developing economics.

To keep the Plan current, it is intended to carry out periodic plan revisions designed to adjust to changes in resources availability and to incorporate new activities and projects. At the mid-point of the Plan Period, revenue and expenditure forecasts for 1969 and 1970 will be revised and forecasts covering 1971 and 1972 will be introduced. Through this general procedure the Plan will be kept in step with changing conditions and continue to be a realistic framework for economic decision-making.

IV. Reporting on Plan Implementation:

The responsibility for reviewing implemenation of planned projects and programs and reporting on progress made will be distributed as

follows:

a) Reports to the Legislature - All departments and agencies having projects and programs in the Plan will include in their annual report to the Legislature a section titled "Development Activities" which will summarize accomplishment in the implementation of said agencies' development activities.

b) Reports to the National Planning Council - One of the functions of the Department of Planning and Economic Affairs laid down in Executive Law, Section 683, (10) is to; "Review progress made on programs and projects which have been adopted, initiating special investigations into the execution of these programs and projects and report findings and recommendations to the National Planning Council".

In order to carry out this function the Department of Planning in close co-operation with executing agencies and, where appropriate, foreign aid givers, will submit periodic reports to the Chairman of the National Planning Council on plan implementation. These reports will describe progress made in implementing programs, projects and activities specified in the Plan. Where appropriate, suggestions will be made for the resolution of problems interfering with successful plan implementation.

The executing agencies and the Department of Planning and Economic Affairs will co-operate in the preparation of these periodic progress reports.

V. External Assistance:

The Plan will be made available to sources of external assistance as a statement of Liberia's development objectives, and a description of planned activities and projects.

Goals and priorities specified in the Plan will serve as criteria for the National Planning Council in carrying out its functions relating to review and evaluation of projects to be carried out with foreign countries.

The availability of foreign aid will not, in itself, be considered sufficient justification for approval of a given proposal. Executive Order No. VI, 1965 specifies the procedures for the elaboration, approval and implementation of programs, projects and activities carried out with foreign aid. These provisions include the following:

a) The review and approval of proposed projects on behalf of Government is the responsibility of the National Planning Council.

b) The Department of Planning and Economic Affairs, in its functions as Secretariat to the National Planning Council, will receive and study all project proposals invloving foreign aid for the purpose of making recommendations for appropriate action to the Council. Approval by the Council constitutes official commitment of Government to the project. In addition, the Technical Assistance Commission is empowered to take necessary measures to expedite project implementation.